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Readings and Interpretations

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This series is addressed to college and university teachers, to students of South Asian history, and to serious readers of the social, cultural, political, economic and intellectual life of this part of the world. Each volume, edited by a specialist, will comprise a detailed introduction, followed by a careful selection of the important and historiographically significant essays and book-extracts on its subject.

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To the memory of
GITA BANERJI
LOUIS MARIN

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Introduction

MONICA JUNEJA

'[Architecture] . . . is the knowledge of how to go about using houses and mansions for cover and shelter. This is because man has the natural disposition to reflect upon the outcome of things . . . [men] must protect their community by surrounding it with a wall to guard them. The whole thing thus becomes a single town or city . . . Architecture is also needed when rulers and people of a dynasty build towns and high monuments. They try their utmost to make good plans and build tall structures with technical perfection so that [architecture] can reach its highest development . . .'—Ibn Khaldun, *The Muqaddimah: An Introduction to History*, trans. Franz Rosenthal, Princeton 1967, vol. II: 357–9.

'In the *house of God*, which presupposes the existence of a living community, the congregation fulfills the task of establishing connections . . . The congregation which assembles [here] for prayer and worship, outgrows the imperfection of communal life, not in order to overcome it, but to keep it alive in thought and to repeatedly integrate it within a state of tension . . . Through the edification of the congregation, the community perpetually renews itself, and this elevation above the everyday keeps the everyday from going under.'[1]—Siegfried Kracauer, *Das Ornament der Masse: Essays*, Frankfurt/M 1963: 159–60.



To the fourteenth-century historian Ibn Khaldun, the functional aspects of architecture made it, together with agriculture, tailoring and weaving, a 'necessary craft' in any 'sedentary civilisation'.[2] He did not fail to perceive that these uses were both physical and social: building creates spaces which demarcate and separate, it constitutes units, defines group and community from 'others'. Like the wall of China in Kafka's story which united the people into a 'ring of brothers',[3] built structures served to bond those protected by them. By

generating feelings of allegiance and solidarity, they were understood as physical manifestations of social and political order.

Separated from Ibn Khaldun by over five centuries and vast cultural distance, Siegfried Kracauer, the German architect and cultural theorist, viewed architectural space as a medium to understand society: within it the 'realities' of the everyday and their suspension exist in a state of dialectical tension, enabling communities to attain a heightened consciousness of self, as individual, group and collectivity. Architectural space forms a space of encounter, of imagining, of belonging, and equally a space of transcendental homelessness, as Kracauer characterised some of the spaces of modernity, notably that of a hotel lobby.[4] If the understanding of architecture has at times seemed trapped within questions of form per se, it had also, as these disparate examples suggest, for long been able to transcend the limitations of such a frame. These are some of the issues this collection seeks to address: the varying trajectories followed by writings on the architectural history of medieval India; the ways in which studies of forms and contexts have been cast and recast in these histories; and finally, the possibilities of revitalisation within the discipline as it stands today.

This volume traces the development of the discipline of the architectural history of medieval India by situating a range of writings from the mid-nineteenth century to the present day in the contexts wherein they emerged and were elaborated; by calling into question the intellectual and cultural factors that impinged on these writings; and by examining their implications for present and future research. A certain self-reflexivity in which the choice of theoretical perspectives and methodological strategies has been foregrounded informs the orientation of this enterprise. It is rooted in my own particular understanding of the subject: that of an art historian anchored within the discipline of history.

This book forms part of a larger effort to remove art forms from the realm of the exotic, and of purely aesthetic value judgements—themselves historically constituted—and to bring them back into the centre of history. It locates the study of architecture within a larger field of socio-cultural history: what constitutes this field has been shaped by developments in historical studies during the last three decades or so.[5] The notion of culture has now been radically recast within a mould which joins it to questions of power. It seems no longer plausible to accept culture as something shared by all members of a society. Rather, we understand it as something constituted through, or fractured by, differences of class, gender and ethnicity. Moreover, the claim of coherence

and internal consistency within culture—in others words, culture read as a system of symbols or structure of relations—has given way to a conceptualisation which sees culture as a plurality of discourses and practices coexisting within a dynamic field of interaction and contestation.[6] To what extent, then, is it possible to situate a study of the cultural forms that proliferated during the centuries designated the 'medieval' period of Indian history within such a field, where hegemonies were continually being constituted, contested and transformed? Can the study of medieval architecture, in particular, be read as integral to histories of power and domination, of conquest and state-formation, of movements of men and women, ideas and traditions? Can we recover some of the ways in which the structures and spaces of the built environment participated in the dynamics of conflict and coexistence, of processes of exclusion and assimilation that marked relationships between the subcontinent's communities and socio-religious groups?

These are some of the concerns crucial to the study of artistic forms, political symbols—and the acts of persuasion built into them—in medieval India. It is unfortunate, however, that the growing body of historical writings on medieval polities, economy, and religious cults and movements, remains confined within artificially created disciplinary straitjackets. This shortcoming applies equally to much of the existing writing in the field of art history.[7] For a long time the landscape of historical research on medieval India was dominated by historians collectively designated as the 'Aligarh School'. A proliferation of writings during the 1960s and the 1970s did make a significant breakthrough inasmuch as they introduced structural factors and quantitative methods as analytical categories to furnish explanations that would effectively counter 'communalist approaches' to the study of Indian history.[8] Working within a somewhat simplistic Marxist framework which relegated cultural practice to a 'superstructure' that 'reflected' the ideological programme of the ruling élites, historians of Aligarh largely bypassed the study of architecture.[9] Implicit in many of their writings was an understanding of culture which came close to nationalist approaches, in that it postulated the notion of a 'peaceful synthesis' of the traditions of Hinduism and Islam, both assumed to form homogeneous, monolithic entities, a synthesis which, in the field of architecture, could be read as a visual translation of the syncretic politics of emperors such as Akbar and Shah Jahan. Such an understanding, unaccompanied by scholarly attempts to historicise the study of forms, has continued to exercise a persuasive power among present-day adherents of a so-called 'secular'

nationalism, especially in the contemporary context of resurgent fundamentalisms.

Today, while another generation of historians has begun rethinking the history of medieval India, an amorphous lack of certainties characterises this field of studies. Most contemporary historical enterprises remain trapped within a myopic understanding of state-systems and politics.[10] This refusal to engage with the rich and diverse histories of architectural creations of these centuries is tantamount to denying that power itself is culturally shaped, that political processes extend beyond the spheres of state institutions and organisations and are inscribed within a variety of settings and textures of everyday life—within spaces and structures that make up the built environment. Similarly, writings on architecture, with a few exceptions, have tended to nestle within a niche of their making, concerned primarily with questions of forms and sources. Examples of attempts by these two streams to reach out to each other are still few and far between.[11]

Any attempt to situate the study of architecture at the crossroads of a history of culture, society and politics must, however, be equally rooted within the particularities of architecture as a form of artistic-cum-scientific production in which the iconic, the spatial, the functional and the technical come together. In other words, the centrality of forms and techniques to understanding the ways in which architectural creations are embedded in larger discourses and practices needs to be recognised. Exploring the myths and fictions which inform a political order, for instance, involves analysing how these fictions are invented and perpetuated, the strategies and dynamics of the rhetoric that render them persuasive and long-lasting. The very form given to a genre of aesthetic production—oral or written, in manuscript or in print, painted or built—belongs to the 'reflexive' dimension of all representations, that is, it embodies the modalities by which an object or a structure is able to 'represent' something else, how it becomes a 'text'.[12] Representation, according to Marin, involves a cluster of 'operations of adaptation and classification that produce the many configurations by which reality is perceived, constructed and represented'.[13] These practices and forms make certain identities recognisable, they exhibit and signify relationships, status, rank, the coherence of a community, the force of an individual, the permanence of a power. Marin's writings help the historian comprehend more fully the workings of the social world, for they point to the ways in which confrontations based on violence and brute force change into symbolic struggles centred on representations. Forms and images become

'readable' as texts of power because they 'bring about a substitution of the external manifestation in which a force appears, only to annihilate another force, . . . bearing the signs or rather signals and indications that need only be *seen, noted, shown*, then *narrated* and *recounted* in order for the force from which they emanate to be *believed*'.[14]

inversely, the act of production, of bringing a structure or a complex into being, inscribes in its forms, spaces and textures its relation to the fundamental structures that, at a given moment and place, fashion the distribution of power as well as the organisation of society and economy. Building activity is as much a socio-administrative act: it involves the control of an apparatus necessary to plan and design, to mobilise resources and labour, to organise the quarrying and transportation of building material. In the monarchical polities of medieval India, patronage itself was a significant act: it spelt power, not only economic and political, but equally ideological—the potential to create utopian ideals of monarchy, to simulate the powers of God. The architectural remains of these societies which form the subject of this collection were a product of the patronage, royal and noble, invariably required for enterprises at that mammoth scale. At one level, as we know, patronage and the creation of such structures were intrinsic to ideologies of power. Plans, designs, and iconic forms all drew upon traditions and languages of a 'high' culture, at times articulated in complex, self-consciously constructed aesthetic-cum-philosophical treatises or statements, but more often through the forms and styles themselves. They formed part of a culture supported and propagated by the state and powerful institutions, in other words a dominant or hegemonic culture of social and political élites. Yet, to what extent is it legitimate to view this culture as autonomous, as existing in a 'pure' form? The endeavour to write a broader history of medieval Indian architecture would involve paying equal attention to modalities of uses and appropriations of buildings and forms, to processes of construction of meaning, to seeing the connections between practices and representations. The location of building within a nexus of urban complexes, as also their use by large numbers of individuals, introduced a varied cultural baggage within this nexus. This included the cultures of non-élite groups which would have brought in an everyday culture of work, belief and ritual, caste and gender relations—through all of which such groups saw themselves as particular communities and engaged with others. Thus the meanings generated around the site of a building were necessarily heterogeneous. The multilayered complexity of such a culture undermines the assumption that architectural activity can be read

as creating distinct cultural objects belonging to an élite alone; therefore the activity demands different modes of analysis. Both interpretive and reconstructive techniques, still a largely unexplored terrain in medieval Indian studies, are needed for a non-reductive investigation of the history of meaning at all levels. The search for such techniques rests on the premise that a range of diversely structured codes create the multiple meanings of almost every building—be it public or ceremonial, courtly, ritualistic or domestic—in even the most self-consciously ideological and aesthetically refined artefacts of high culture.

New nations, it would appear, need ancient pasts. According to Pierre Nora, modern memory relies to a great extent on the materiality of traces, on the visibility of images.[15] Architecture, a central referent in efforts to invent collective memories, comes to be indissociably linked with notions of heritage and identity. The built environment has often been deployed to construct identities, to stress the sameness of individuals who are in fact embedded in multiple and complex social configurations. At the same time, buildings acquire a 'past' through narratives created by historians about them, narratives centring on their origins, construction, symbolic apparatus and uses. This implies a discursive use of architectural remains to build collective pasts that generate feelings of stability, continuity, exclusiveness or belonging, these emotions being necessary to particular social configurations in particular historical contexts, and involving inventions and reinventions, concerted containment, elisions and forgetting, that is what Benedict Anderson describes as 'collective amnesia'.[16] In the context of medieval India, for instance, the invention of a collective past as embodied in its architectural vestiges has often been achieved either through the singling out of individual stylistic threads—Buddhist, Hindu, Islamic or Jain—from an intricate patchwork quilt, or else by viewing the whole as a well-knit, cohesive unit, effacing either way the rich historicity of that past. Buildings and their histories, as a result, have become a site of conflict and tension within political culture. This in turn impinges on the directions chalked out by the discipline of architectural history. These are issues which have come to bear on the trajectories followed by a number of writings on medieval Indian architecture, and which this anthology attempts to address.

The history of architecture as the discipline we know today came into being during the colonial period. The earliest writings in this field were located in specific political and cultural contexts of power, in both colony and metropole. Their pioneering achievements, while providing copious empirical and documentary material for subsequent studies, left a

seemingly indelible stamp on many of the preoccupations and perspectives of more modern historians. The relatively large sample of writings from this period reprinted in this volume testifies to the prolific character of colonial histories of Indian architecture and ought to help the reader gauge their enduring influence.

II

> 'History imposes its law on the distant places it conquers while believing that it is bringing them back to life.'[17]—Michel de Certeau, *L'écriture de l'histoire*, Paris, 1975: 48.

One dimension of the burgeoning scholarship on colonialism has been an exploration of the relationship between knowledge and rule, of how colonisers in the nineteenth and twentieth centuries sought to create the categories through which they classified and surveyed their subjects—tribes, castes, races, élites, tradition, Hindus, Muslims, and so on—and transformed these into organising principles of daily life. Foucault's insistence on the inextricable relationship between knowledge and power, followed by Said's impassioned exposition of the structures of Western knowledge *vis-à-vis* the non-West and their instrumentality in the exercise of colonial power, have had a lasting impact on studies of colonial India. The focal concerns of these have progressively shifted from the political economy of production to the cultural complexes of representation. Projects of collecting and organising knowledge—classifying people and attributes through censuses, surveys and ethnographies, the publication of histories and gazetteers, surveys of archaeological sites and monuments, the establishing of routines and standardising of practices—have all been analysed as colonial constructs which sought to create categories useful to colonial understanding and control. Visual and spatial forms have also been cast within this paradigmatic mould and architecture, located within a 'general sociology of knowledge', has been described as 'but one manifestation of an interconnected structure of power and knowledge that informed colonialism everywhere'.[18]

It is not my intention to question this excessively broad paradigm which is too general to take us very far. The essentialising thrust of a framework which makes East and West, Self and Other, into static, undifferentiated polar opposities, has been adequately critiqued.[19] Yet the Saidian model can be fruitful when refined, its workings fleshed out and the tensions, contradictions, and ambiguities of historical processes

understood in all their idiosyncratic particularities. Colonial approaches to Indian architecture, in particular, sensitise us to some of the problems inherent in unilinearity and excessive systematisation while studying 'a colonial project'. The colonial study of culture went beyond being a product of ideologies emanating from the metropole, even if the culture of colonialism did participate in creating such ideologies, as well as the categories 'metropolis' and 'colony'.[20] 'Culture' was more than an instrument or means of control: it is more usefully viewed as something constantly being invented and reinvented in relationship to a multiplicity of 'internal colonialisms'.[21] Moreover, it is necessary to take account of the specificities of architecture as a discipline and social phenomenon.

Regarded as both art and science in Englightenment Europe, where it was constituted as a discipline in its own right, architecture was located at the interstices of archaeology, museology and history, and could thereby forge links between different bodies of knowledge. The colonial enterprise of studying Indian architecture, I would suggest, ought to be read in terms that take us beyond the somewhat limited agenda of classifying, siting and mapping,[22] to understand it as an enterprise addressed to different social groups, in the metropole and the colony. This would allow us to recover these prolific studies as part of an exercise of constituting different 'selves', as a discursive mould in which both nation-state and colony were held together, yet one committed to the constitution of difference. The process of differentiating between East and West, as an analysis of colonial writings on architecture will reveal, went hand in hand with attempts to write a universal history of humanity which sought to incorporate all civilisations within an ascending scale of progress, culminating in the achievements of the capitalist nation-states of Western Europe. In this manner, different approaches to the study of architecture coexist with little sense of incongruity or unease. The concerns of these writings register shifts, and at the same time display continuity, indeed a remarkable tenacity, for categories of colonial knowledge came to be appropriated by nationalist and postcolonial forms of writing across the political spectrum. Keeping in view the far-reaching implications and postcolonial legacy of colonial writings on Indian architecture, the import of colonial writings—taking the example above all of James Fergusson—is examined here in some detail.

The enterprise of studying architecture in colonial India was preceded by, and in a sense grew in tandem with, a comprehensive archaeological survey of ancient sites and monuments pioneered by Alexander Cunningham, and then continued by H.H. Cole who extended the map of

Cunningham's explorations.[23] The establishment of the Asiatic Society in 1784 provided an institutional focus for Indian antiquarian research. The society derived its impetus from British ascendancy and its consequent need to know the country. In addition, Western scholarly interest perceived in India a possible source of culture and civilisation.[24] Two basic theoretical frameworks within which the earliest studies were undertaken can be identified: on the one hand, explorers and surveyors like Rennell, Buchanan[25] and Mackenzie[26] were interested in 'objective' reporting and the plotting of sites; on the other, scholars like Sir William Jones wanted to link the history of India with early centres of civilisation in the light of the biblical theory of creation.[27] Till about 1830, archaeological enterprises were confined to deciphering early scripts. James Prinsep, appointed Secretary of the Asiatic Society in 1833, successfully deciphered between 1834 and 1837 the Brahmi and Kharoshti scripts.[28] The years following 1830 witnessed the excavation of a large number of sites and antiquities. In response to the need for a systematic country-wide survey of archaeological sites the Archaeological Survey of India was established in 1861 with Alexander Cunningham as Archaeological Surveyor. The aims of survey in northern India were defined: 'an accurate description—illustrated by plans, measurements, drawings, or photographs and by copies of inscriptions—of such remains as deserve notice, with the history of them so far as it may be traceable, and a record of the traditions that are retained regarding them'.[29] Cunningham's working career, which extended till 1885, witnessed the systematic expansion of field archaeology. The Cunningham surveys (*Reports*) made available the topographic details of a very large number of Indian sites over an expansive territory. These reports are full of basic information on different categories of 'documents' of Indian history—sculpture, architecture, coins, inscriptions, historical geography—and Cunningham himself contributed significantly to the growth of a holistic understanding by producing a few major works of synthesis.[30] He considered architecture an extremely important part of archaeological data and his *Reports* contain voluminous information. Yet the evidence of style in architecture was, in his understanding, entirely of a corroborative character and subordinate to what he regarded as the primary evidence of inscriptions. Lists of antiquarian remains in the field of architecture continued to be a concern of archaeological surveys throughout the century, as is evident especially from the prolific writings of James Burgess, Robert Sewell, E.W. Smith and others.[31]

However, the systematic delineation and documentation of Indian

architecture as a field in its own right, albeit still within an antiquarian tradition, had been pioneered several decades earlier. By the middle of the nineteenth century, when Cunningham initiated his extensive field surveys, the basic nature of the monuments and historical sites of India was well understood. Among the earliest theoretical studies of Indian architecture seems to be a commented English translation of a fragment of the *Śilpa Śāstras*, the *Manasāra*, undertaken by Ram Raz, an Indian judge in the service of the Company at Thanjavur and published in 1834 under the title *An Essay on the Architecture of the Hindus*. The exercise was carried out in consultation with a local architect and craftsman of the Camatta tribe, who could explain to Ram Raz the meanings of technical terms used in the original Sanskrit text. The *Essay* contained forty-six illustrations, gave exact measurements of the proportions used in different styles of architecture, and discussed the qualifications of an architect and the different types of building material used by architects in India.[32] While this work came into being 'under the aegis of Orientalism',[33] that is, it compiled the fragments of a Sanskrit treatise on Indian architecture, inaccessible in the original, to a Western readership—the method followed by Ram Raz, which was to make a careful comparison between an architectural text and surviving monuments, was pioneering and was not taken up and followed by historians of architecture till a century later.

A subsequent example of indigenous initiative in the field of architectural history is the work of the historian and astronomer who is better known as a reformist intellectual of Delhi, Sayyid Ahmad Khan. He published an extensive description of the monuments of Delhi, *Āsār as-Sanādīd* (Vestiges of the Past), in 1847.[34] The intellectual activities of Sayyid Ahmad Khan can be located within a flourishing tradition, a literary and cultural 'ecumene' of which writings on history and topography occupied an important position.[35] Seven years following the first edition of the *Āsār as-Sanādīd*, Sayyid Ahmad published a considerably reworked and significantly altered second edition of the text.[36] The first edition of the *Āsār as-Sanādīd* was very much in the traditional mould of Indo-Muslim histories in which poetry, panegyric and moral and political instruction were fused, and the cultural diversity of Hindustan lavishly praised.[37] Historical and topographical writings in Persian made up a distinct genre and it would seem that the example of earlier writings, such as Ali Akbar Beg's *Sair al-manāzil*, a topographical account of the principal buildings of Shahjahanabad, or a similar account of Agra (Akbarabad) written a few years earlier in Persian, had directly

or indirectly inspired Sayyid Ahmad Khan's enterprise.[38] The preface to the first edition of *Āsār as-Sanādīd* gave the full title of the work as 'The vestiges of former ages and the life and customs of eminent personalities of India'. The work is divided into four chapters: (i) buildings outside the town, containing a description of 130 Hindu and Muslim structures; (ii) Delhi Fort, with a description of 32 buildings in the area of the Fort; (iii) Shahjahanabad, with a description of 72 architectural structures of the city; (iv) Delhi and its inhabitants. This (fourth) section contains a historical survey of the successive settlements of Delhi, followed by a short account of its climate and language. It then furnishes the reader with biographical sketches of 119 personalities of the city, which the author groups into categories of sheikhs, hakims, 'alims, Qur'an-reciters, poets, calligraphers, painters and musicians. It further includes copious extracts from the writings of Delhi's literati, including appreciations or reviews of this account itself by illustrious writers such as Ghalib and the Nawab of Laharu. Such details usually formed part of almost all Persian histories—Nizamuddin Ahmad's *Tabaqāt-i Akbari* is one well-known example.

The work, dedicated to Sir Thomas Metcalfe, Resident of Delhi, is preceded by an eulogy in Persian verse (*taqrīz*) of the author and his work by Nawab Ziya ud-din, one of the earliest 'native' members of the Archaeological Society of Delhi. It concludes with a number of similar eulogies and is illustrated by drawings of many of the buildings described in the text. On the whole, this first edition is written in a highly ornate, flowery Persianised Urdu, richly interspersed with Persian verse, and wherein even the prose rhymes.[39]

The second edition of Sayyid Ahmad Khan's book was published in 1854, following his admission in 1852 as 'Native Honorary Member' of the Archaeological Society of Delhi. This society was founded in 1847 with Sir Thomas Metcalfe as its President, following the growing interest in archaeological studies and fieldwork among British officers during these pre-Mutiny years. The Society defined its objective as the investigation 'by means of plans, drawings, and elevation, by inscriptional, traditional and historical researches, and, if possible, by publications of the ancient remains, both Hindoo and Mahomedan, in and around Delhi', and it enjoined all members of the Society 'to communicate such information, as may not be considered within its immediate pale, especially statistical researches', information 'likely to contribute to the general stock of our knowledge of the country, which it is highly desirable to cultivate and improve'.[40] In 1850 the Society formally decided

to seek the active collaboration of 'distinguished' Indian scholars who would then be selectively admitted into its ranks. On 7 October 1852, following his admission, Sayyid Ahmad Khan read a short paper, 'On the Bricks employed in Building in different ages in India', at a meeting of the Archaeological Society, which was subsequently translated into English and published in the *journal* of the society.[41] It is against this background that the changes made by Sayyid Ahmad Khan in the second edition of *Āsār as-Sanādīd* can be explained, for he consciously seeks to locate the text within a different tradition—that of the historical and archaeological writing promoted by the Asiatic Society of Bengal and the Archaeological Society of Delhi.

In the preface to the 1854 edition of *Āsār as-Sanādīd*, Sayyid Ahmad Khan informs the reader that this edition 'is superior to the earlier one in many respects', for it rectifies many of the shortcomings of the earlier work, notably mistakes in the description of monuments.[42] Moreover, whereas in the previous edition the presentation of the edifices was scattered and disorganised, now the descriptions of all buildings were arranged according to their year of construction. While the first edition did not cite the historical texts from which these expositions were drawn, the second edition quoted in full, in the margins, the titles of all books used. A further creditable feature of the 1854 edition, according to the author, was an appendix in which all epigraphs were entered in their original form, length and style of calligraphy. The first and third chapters of the earlier edition were now combined into the third chapter of the second edition, whereas the fourth chapter, containing the eulogistic sketches of eminent individuals of Delhi, was dropped completely in the 1854 version.[43] It would appear that Sayyid Ahmad Khan now sought to focus his work more centrally and explicitly on the monumental structures of the city, the number of which he included in the second edition being considerably larger. His exposition, now made in a more sober, restrained and concise idiom and which rarely strayed beyond a factual description, seems to aspire towards the norms of historical scholarship of a Rankean variety. In an attempt to locate his study in a 'historical' frame, the author added to the work a new first chapter in the form of historical tables, listing in chronological sequence basic information about the rulers of Delhi from mythological times up to the present. The idea of supplying a certain amount of basic factual information in tabular form—so as to provide a handy work of reference—seems to have enjoyed a certain currency in British writings during the nineteenth century. One example of this practice was James Prinsep's widely disseminated

Useful tables illustrative of Indian history, chronology, modern coinage, weights and measures, first published in 1834.[44]

The first systematic and comprehensive historical study of Indian architecture from a colonial perspective was undertaken by James Fergusson. He was a Scottish indigo planter who, between 1835 and 1847, travelled widely, observed architects and workmen engaged in the construction of temples, and conducted an extensive survey of the different types of ancient buildings in India. Fergusson's first major publication on the history of Indian architecture, *On the Rock-cut Temples of India*, presented as a lecture in 1843, appeared in 1846.[45] This was followed in 1848 by *Picturesque Illustrations of Ancient Architecture in Hindustan*. From the time of his earliest writings, Fergusson sought to demarcate his approach to the subject of architecture from that of archaeologists surveying sites and monuments. To this end he evolved a systematic typology of structures on the basis of their stylistic components, from which point he then proposed to study the evolution of styles. He not only compiled the first illustrated history of Indian architecture, he also evolved a system of classification of buildings which, for many years, remained the only tool for architectural surveys with his successors in the field. Fergusson's most detailed and representative study was his *History of Indian and Eastern Architecture*, whose first edition appeared in 1876.[46] Already in the 1860s, Fergusson had participated actively in an extensive drive launched in England to prepare drawings, photographs and casts of ancient architectural specimens of the Indian subcontinent. Apart from documentation, conservation was an important objective of this initiative: the need to preserve visual records of a history and tradition threatened by decay and extinction.[47]

And yet, the study of the colonial engagement with architecture cannot be viewed as purely an offshoot of archaeological enterprises. The distinct disciplinary identity of architecture was evident to practitioners of its history in Europe during the late eighteenth and nineteenth centuries. From the moment when art history was constituted as a discipline, architecture was assimilated to the domain of the arts. In Europe this 'ordering of the arts' as a self-conscious enterprise was well under way by the mid-eighteenth century.[48] The mammoth Enlightenment enterprise of organising knowledge, Diderot and d'Alembert's *Encyclopédie*, effected a separation of the fine arts—comprising painting, sculpture and architecture—and their two 'sister arts', poetry and music, from all other human activities, establishing them as unique repositories of the 'spirit of life', as embodiments of 'eternal truths' which would 'hold

together a civilised society'.[49] In England, Sir Joshua Reynolds, President of the Royal Academy of Arts, where he delivered his annual Discourses, squarely located architecture within the domain of the imagination, its forms no less an expression of 'originality' and 'genius'.[50]

At the same time, the arts came to be recognised as 'sciences' (*Wissenschaften*), in the sense of fields of knowledge, and like other sciences they required a history.[51] Among the pioneer art historians to accord to the history of art the status of a science was the German aesthetician, Johann Joachim Winckelmann. His systematic historical study of classical Greek art soon displaced accounts which had leaned heavily on Vasari's biographical and anecdotal approach to art history.[52] More often than not, the works that ordered the arts into the discipline of art history during the late eighteenth and the nineteenth centuries emerged as canonical texts, for the 'facts' they recorded were rarely free from judgement, or lacking in criteria for the constitution of taste. Reynolds' *Discourses*, for example, envisaged an imaginary scale of merit and excellence in which artists of every period competed for a place.[53] More centrally influential was Winckelmann's characterisation of Baroque or Rococo art as a 'tradition in decline',[54] which motivated a radical renovation within Western art through recourse to a rejuvenated classical ideal.[55]

It was the force of this ideal that formed the underpinning of the aesthetic judgements of colonial writers as they viewed different streams of Indian art in the light of the Graeco-Roman canon. In addition, it led them to apply a teleological notion of progress/decline to their analysis of stylistic evolution within Indian art. In Winckelmann's scheme of things, while Greek art evolved along its path to perfection, Oriental art, by which he meant Egyptian and Persian, remained stagnant and moribund.[56] Mitter cites Winckelmann's belief in climatic determinism as an explanatory factor within his analysis, and one which came to inform subsequent Western views on the East.[57] Yet he overlooks a central and significant tenet of Winckelmannian aesthetics which, to my mind, exercised a deeper and more far-reaching power over colonial constructions of the difference that was held to mark the metropole from the colony. Winckelmann saw political freedom as the most important ethical ideal that would engender 'noble' art, an ideal that was an underlying condition for the efflorescence of the arts in Greek antiquity.[58] The enterprise of a colonial writer on Indian architecture like Fergusson, steeped in the categories of the newly formed disciplines of art and history, can be read as an attempt to use their methods to recuperate, on behalf of an uninitiated public of colonised subjects, a sense of their own past.

For Fergusson architecture, situated as it was at the conjunction of art and science, formed the 'ideal vehicle' which could stand for 'universal truths'. These, abstracted from the language of forms, would serve the purposes of instruction and help secure the foundations of the colonial state.[59] And yet Fergusson's writings on the history of Indian architecture ought not to be read entirely in terms of the buttressing of a single, homogeneous colonial project carried out in substantial measure through the construction of religious and racial categories as tools of analysis. Although he does undoubtedly deploy these categories, and with lasting implications for contemporary and subsequent understandings of the subject, Fergusson's enterprise of writing a systematic account of Indian architecture had a range of concerns which subjected his oeuvre to a series of tensions. His writings occupied the fluid terrain between universal and national histories and were addressed to many publics, both in the metropole and in the colony. In fact, through the creation of a particular discipline they constituted their own public on both these terrains. The recuperation of an 'unwritten' Indian past was carried out within the framework of a notion of 'difference' which, in Fergusson's writings, revolves around a series of oppositions: between classical purity and opulent decay, between rationality and superstition, written and unwritten histories, political freedom and despotism. Difference, at the same time, needed to be domesticated: 'otherness' had to be mapped on to a familiar cultural horizon of the European readers of these histories, themselves inhabitants of societies fractured by the struggles and cleavages that were integral to the making of modernity. Within the domain of the colony, it was necessary to define the limits within which Western knowledge could be received, assimilated and applied by the subjects to whom these writings were equally addressed. The emergence of a new public—an indigenous élite within the colonised, educated in the modes of Western knowledge—generated its own tensions, as the example of Rajendralal Mitra cited below will illustrate, underlining the need to demarcate the boundaries of bi-cultural exchanges.

There were several dimensions to Fergusson's conviction regarding the relevance of studying Indian architecture. The years following the 1857 Mutiny were marked by a debate over the style to be adopted for new buildings. Opinion was divided between those who favoured classicising European styles as a means of inspiring the 'natives' with awe, and those who were convinced of the need to integrate indigenous building elements within colonial structures.[60] Knowledge of Indian architecture was still limited; publications which could be meaningfully used

by professional architects were few and far between. Fergusson saw it within his power to meet this need through an 'intelligible' account of India's architectural history, which he set out to write—a task made considerably easier by the development of photography. On 21 December 1866 he delivered a lecture 'On the Study of Indian Architecture' to the Society of Arts in London. He made a series of arguments about the uses of the study of Indian architecture. It would enable, he said: a selective and discriminating deployment of its forms in colonial building enterprises; a fuller understanding of the ethnology and religions of India; Indian subjects of the Empire to possess a sense of their own history; a source of ideas for the improvement of architecture in England.[61] This seminal lecture outlined Fergusson's agenda for his subsequent writings; it affords us a glimpse into the plurality of his concerns, the different publics to which it was addressed, and the discursive space linking metropole and colony which it came to occupy.

Fergusson's conviction that the study of Indian architecture could be relevant to the improvement of style in England is not as surprising or paradoxical as it may seem.[62] Definitions of taste in Europe during the late eighteenth and nineteenth centuries were fairly fluid. In spite of the canonical status of classical traditions, the emergence of new cults of the sublime and the beautiful, as also theories of the picturesque, had encouraged a novel delight in irregularity and intricacy, a celebration of eclecticism, a refusal of fixity, and a valorisation of the imagination.[63] As a result, a number of artists and architects were prepared to look elsewhere, to non-classical traditions and beyond Europe, for inspiration. Within this aesthetic search Indian forms were perceived as being endowed with a liberating potential. Joshua Reynolds, extolling the 'barbarick splendour of those Asiatick buildings', argued that they could supply architects with 'modes to copy . . .'; he added the warning that the 'sound rules of Grecian architecture are not to be lightly sacrificed', and only the 'great master' was capable of a discrimination and control over the medium that would allow selective appropriations of certain influences rather than their wholesale emulation.[64]

The use of an 'Indian style' could indeed be observed in a range of buildings during the late eighteenth and nineteenth centuries—in private homes, market halls, garden pavilions, conservatories, gateways, buildings for entertainment. As an architectural practice this was more widespread than is usually believed.[65] Later, during the nineteenth century, the asymmetries of colonial power made the adoption of an Indian style difficult for certain kinds of public buildings, yet it continued to enjoy

favour in the construction of an eclectic mix of structures, those of recreation in particular. The Orient was regarded, or being 'constructed', as a space of relaxation and hedonistic pleasure. Throughout this period and into the early twentieth century, questions on the appropriateness of Indian styles—Hindu, Indo-Saracenic or Anglo-Indian, as they were popularly labelled—in English architecture continued to figure within discussions and debates amongst planners, architects and engineers.[66] These debates made up a cultural field governed by the contradictory pulls of a number of aesthetic canons. At a historical moment when Western nation-states were marked by deep social cleavages and confronted oppositional movements for democratisation and social reform, a sense of cultural integrity was sought to be maintained through continual processes of invention and reinvention whereby the nation and the self came to be viewed through the prism of alien cultures. Such cultures were brought home through a range of practices—through exhibitionary complexes, through the compilation of universal histories within which the nation was embedded, through growth in the fields of knowledge and related disciplines ranging from geology to bio-medicine, and from art to anthropology. Colonial writings on architecture, notably those of Fergusson and later E.B. Havell, participated in this complex cultural field; they formed one of its constituent elements.

Fergusson conceptualised *The History of Indian and Eastern Architecture* as part of a larger enterprise of writing a universal history of architecture addressed, above all, to a Western readership. In fact, this text came as a sequel to his earlier study, *A History of Architecture in All Countries from the Earliest Times to the Present Day*, published in 1865 in three volumes.[67] The author located this series within a new paradigm, informed by a shift from a 'topographical' to a 'historical' approach. He defined the difference between the two as follows:

> If the intention is only to describe particular styles or separate buildings, the topographical arrangement may be found more convenient; but where anything beyond this is attempted, the historical method is the only one which enables it to be done. Believing that the architectural public do now desire something more than mere dry information with regard to the age and shape of buildings, it has been determined to remodel the work and to adopt the historical arrangement.[68]

Fergusson's *History* sought to create a new space of representation. Architectural study was being made part of a larger ensemble depicting the development of peoples, states and civilisations through various

stages.[69] This process found its parallels in a number of disciplinary and cultural practices of nineteenth-century Western Europe, from museological displays to historical romances, all aiming at the lifelike reproduction of an 'authenticated past' as a series of stages leading to the present.[70] The writing of universal and national histories was a central element here: the history of the nation-state and that of its non-European 'other' functioned not merely as polar opposites, but also as two faces of the same coin, as participants in a more complex process of the historicising of territory and the territorialising of the nation.[71] Colonial expansion, archaeological excavations, surveys of antiquities and monuments, all extended the time horizons of historical studies in the West beyond the medieval period and that of Graeco-Roman antiquity, encompassing remnants of a more distant past—the civilisations of Egypt, Mesopotamia and later the Indus Valley. These enabled a new genre of historical writing, that of the universal history of civilisations, and within this Fergusson located his oeuvre. It became possible now to annex the recent national histories of newly emerging states in Europe to these universal histories, whereby the former could be represented as a cultivation and fulfilment of the universal story of civilisational growth.

Fergusson's writings were addressed to a Western readership in a more direct and specific sense. During the nineteenth century, India was experienced and imprinted on the minds of a metropolitan public in ways which were piecemeal, elusive and often chaotic. Visual literacy about the subcontinent was marked by the widespread presence of objects, artefacts and architectural quotes, all more often than not divested of their contexts—turban domes, a cusped arch, conservatory chimneys turned into minarets; or the colourful pageantry of crafted objects, textiles and assemblages at the India court during the Crystal Palace Exhibition. The years following the World Exhibition of 1851 saw an efflorescence of 'colonial collecting', public and private, of Indian artefacts—coins, ritual objects from pilgrim centres, miniatures and prints, *objets d'art* of eclectic tastes and origins.[72] A history of architecture cast in a civilisational narrative frame, as Fergusson's was, responded effectively to the needs generated by the diffuse and disorderly character of these collections. It was motivated towards creating identities for a motley range of objects, relocating them within a context, inventing a tradition within which they could be embedded. Writings of this genre created what Breckenridge describes as a usable past that was, at the same time, an ordered one.[73]

What is equally important is the mould within which this past was

cast so as to render it tangible to its metropolitan readers. Fergusson's *History* drew upon Enlightenment methods of classifying knowledge and ordering observations into hierarchies: Rankean historicism and the Winckelmannian canon were two of the disciplinary strands he deployed to make the study of Indian art accessible to a Western readership. Taste, as exemplified in the art of European antiquity, was the measure of perfection against which Indian art was judged and classified into stylistic units. Buddhist–Gandharan architecture, characterised by a certain 'classical' simplicity and purity of form, was seen to represent the highest stage of aesthetic excellence attained by Indian art. 'Hindu' architecture, on the other hand, with its excessively ornate surface decoration and 'false' principles of design, stood in Fergusson's scheme as the polar opposite of the Buddhist. He could then conceptualise the history of Indian architecture in terms of an evolution from the first type to the second, drawing upon European historicist analytic frameworks which proposed a teleological idea of progress for the study of Western civilisations, and art in particular. When applied to the study of the 'decaying' civilisations of the East, Fergusson could invert this model of progress into one of progressive decline, retaining, in his eyes, its methodological efficacy and rigour. His *History* could then serve as a reminder of the advantages of the scientific methods of Western scholarship, underscoring thereby the difference of the non-Western Other. At the same time, Fergusson's avowed objective of building a bridge between the underlying principles of Indian architecture and the practice of this art in the West translated a simultaneous need to map and assimilate that 'other' onto the cultural worlds of the metropole in ways that were not necessarily complicit with the exercise of colonial power. This paradox is apparent within his entire oeuvre.

Fergusson conceived of his enterprise of writing a comprehensive and systematic history of Indian architecture as part of a cultural flow in both directions, addressed to readers in the metropole as also to a potential readership in the colony.[74] For his work would make available to the colonised a sense of their own past, a linear history whose sources would be dated and classified following the norms of positivist historiography of nineteenth-century Europe. Architecture was, in Fergusson's understanding, among the few reliable forms of evidence which could serve as the basis for a 'scientific history of India'. '[In] a country', he wrote, 'which has no written histories it affords almost the only means that exist for steadying any conclusion we may arrive at, and is a measure of the greatness or decay of the dynasties that ruled the country in

ancient times.'[75] An ethnological reading of monuments and sculptures, he believed, furnished evidence for myths and rituals, religious beliefs, clothes, appearances and practices of everyday life.[76] At the same time, Fergusson's placing of these styles and monuments with a scale of excellence and decadence sought to transmit aesthetic notions and values which would function as markers of 'distinction'[77] among a certain group of individuals. In this sense his writings intervened to constitute a new public from among the colonised by inscribing this public in a new relationship with its own past. This was a public whose minds were to be formed through certain genres of academic writings, while their tastes came to acquire the imprint of cultural canons that made discrimination possible between merit and mediocrity, between the original and the imitative.

The success of this enterprise can be gauged by the fact that the very same terms of discourse were deployed by writings articulating nationalist responses to colonial readings of Indian history and culture. The example of Rajendralal Mitra, one of the earliest of Indian Sanskritists trained in European academic methods, is a case in point. In a two-volume study of the antiquities of Orissa, Mitra launched a spirited defence of Indian art against European assumptions, especially those of Fergusson and Cole, which had postulated a decisive influence of Greek and Roman forms in the shaping of Buddhist art. He marshalled a range of evidence to prove in turn the 'originality' and 'inventiveness' that Indian art forms possessed, emphasising the accuracy of his readings of texts and inscriptions and their relationship to forms and functions of structures.[78] Fergusson's blistering counter-attack on Mitra points to the dilemma intrinsic within the colonial enterprise of recuperating the histories of colonised regions for purposes of instruction and the creation of a new class of 'native subjects': the need to demarcate the limits of bi-cultural exchanges was equally urgent—'before some of the natives', warned Fergusson, 'were spoiled by contact with European civilisation . . . the most glaring defect of this easily acquired knowledge is the inevitable conceit it engenders. A man who by powers of his memory alone has become familiar with a great mass of scientific facts, is apt to consider himself quite equal to those who, by long study and careful reasoning, have assimilated the great truths of scientific knowledge.'[79]

Fergusson's writings on the history of Indian architecture occupy a somewhat fluid terrain between universal and national histories. While the search for a suitable frame in which to situate his representation of

the Indian past led him to draw upon Eurocentric lexicons of the nation-state as articulated in the disciplines of history and art theory, his narrative was equally intended to serve as a mode of instruction for colonised subjects. He was aware that the reception of this instruction could never follow identical trajectories in colony and metropole, for the former was made up of subjects and not citizens. A particular notion of this difference inevitably permeates his categories of analysis; it further enables him to handle the contradiction between his conviction regarding the relevance of the study of Indian architecture to the West and the fact that its aesthetic qualities fall short of the classical canon he chooses as a yardstick of excellence.

One way out of this paradox, according to Partha Mitter, was made possible by drawing upon the Hegelian notion that all art necessarily expressed the 'innermost spirit of a people or a nation'.[80] Yet Hegelian essentialism was not sufficiently equipped to form the crux of Fergusson's analysis. It was rather the example of anthropology, which, during the nineteenth century, performed the crucial ideological function of connecting the histories of Western nations and civilisations to those of 'other peoples' by creating an order of peoples and races, that furnished Fergusson with the explanatory tools to undertake a stylistic classification and analysis of Indian art.

Fergusson divided the history of Indian architecture into certain broad phases: the first phase, dating from the second century BC to the first century AD and coinciding with the construction of the Buddhist monuments at Sanchi, Bharhut and Amaravati, marked the highest level of artistic achievement. The excellence of this art derived from a racial purity untainted by 'corrupt' Brahmanical influence, from the 'nationalistic' principles of the Buddhist faith, and very likely from the presence of Greek masons and designers drawn from the Indo-Greek colonies of Bactria.[81] This epoch of greatness gave way to decay, following the waning of Greek influence and the racial subjugation of Aryans by culturally inferior Turanians. Racial mixing, in Fergusson's interpretive scheme, meant the absorption of 'absurd fables and monstrous superstitions', the stranglehold of a 'corrupt' hierarchical order and a consequent 'debasement' of artistic quality.[82] All subsequent architecture until the coming of Islam was designated 'Hindu' by Fergusson and classified into stylistic groups following ethnic categories: the northern or Indo-Aryan; the southern or Dravidian; and a third racial group whom he names Dasyus, these being neither Aryan nor Dravidian but inferior

to both.[83] The style of architecture associated with this last ethnic group was described as 'a square tower-like temple with a perpendicular base, but a curvilinear outline . . .'[84] The Dravidians, an indigenous Turanian group, were indefatigable builders, yet owing to their 'lower intellectual status', their architecture lacked grandeur or nobility. Here religious influence combined with racial inferiority to produce an art marked by an inherent poverty of design, stemming from an inability to master arcuate principles of construction and therefore resorting to excessive surface ornament as a camouflage for structural weaknesses.[85]

Ethnic groupings and religious affiliations were not the only classificatory categories employed by Fergusson in his enumeration of styles of Indian architecture. At times he resorted to the dynastic principle, as in the case of the 'Chalukyan style', or used geographical division, as in a chapter entitled 'Architecture in the Himalayas', with sub-sections on Kashmir, Nepal and Tibet.[86]

The narrative of continuous decline, which formed a central organising principle of the first half of Fergusson's *History*, is interrupted by the author's handling of the Turkish conquest of northern India in the twelfth century. The advent of Islam, according to Fergusson, infused a fresh vigour in Indian architecture as it freed the artist from the 'trammels of Puranic mythology'.[87] While Fergusson shared in a larger sense the European ambivalence to Islam, his attitude to 'Muslim' architecture in the Indian subcontinent is on the whole positive. It is not insignificant that he uses the term 'Saracenic' to collectively designate the styles and traditions of architecture brought by the Turks to India: the term had a long pedigree going back to the European confrontation with Islam in the Middle Ages and connotated an aggressive crusading populace.[88] At the same time, characterisations of 'Islamic' architecture in Arabia, North Africa and Southern Europe had become the subject of a number of monographs by the time Fergusson wrote his *History*. One of the earliest of these in English was James C. Murphy's voluminous and richly illustrated study, *The Arabian Antiquities of Spain* (1815); amongst the most influential was Owen Jones's two-volume opus, replete with lithographs in colour, *Plans, Elevations, Sections and Details of the Alhambra* (London 1842–5). While to Fergusson Islam in India meant once more the 'racial absorption' of 'outsiders' within the indigenous populace, this did not lead to degeneration. Islam, in relation to Hinduism, stood for a positive cultural force for a variety of reasons: like Christianity, it was a Semitic faith, it had a longer exposure to currents of 'European rationalism', and therefore it had a more 'perfect' architecture.[89] Above all, what enabled a greater appreciation of Islamic building traditions (as

they were viewed through the prism of European aesthetics) was the successful assimilation, as they appropriated extant Roman buildings, of arcuate techniques by structures that had come up in the regions conquered by Islam.

Fergusson described the stylistic evolution of Indian architecture following the Turkish conquest in terms of a fusion or a mixture or combining of Hindu and Muslim forms. While he read these forms as an expression of the 'leading characteristics of the two races', the notion of race was now divested of its ethnological connotations. It gave way to categories that postulated two homogeneous, well-knit religious communities whose often diametrically opposed beliefs, forms of worship and rituals sustained architectural practices to create results that were highly successful and 'unrivalled' for their beauty. Indian Saracenic architecture, as he labelled it, flowered through a large number of styles, thirteen in all, following the tastes and predilections of successive patrons—of the Delhi sultans, of the regional sultanates that emerged following the disintegration of the Delhi empire, and of the Mughals. He then proceeded to add two post-Mughal styles, those of the kingdoms of Oudh and Mysore, which he pejoratively termed bastard styles, thereby suggesting a recurrence of the paradigm of rise and decline.[90]

Fergusson's study of Indian architecture has been quite massively authoritative and influential. It came to bear decisively on writings, as also on architectural policies, of the British Raj during the subsequent decades—as Metcalf's exhaustive study has shown. About a decade after Fergusson's *History*, Vincent Smith published a long article pointing to the ways in which not only architecture and the plastic arts, but also the fields of numismatics, religion, poetry, science and philosophy, owed whatever artistic merit they possessed to Graeco-Roman influence.[91] Drawing upon the aesthetic canon privileged by Fergusson, though with less acumen and scholarly rigour, Smith claimed the art of Gandhara as a yardstick for measuring the excellence attained by the arts of India in different genres. And yet the best of these works, he pronounced, were second- or third-rate as they were evidently 'copied from Greek prototypes'.[92] In 1910 a second, revised and enlarged edition of *The History of Indian and Eastern Architecture*, with an Introduction by Fergusson's student James Burgess, appeared and provided renewed vigour to views about the largely derivative nature of Indian architecture. These were now on their way to becoming established as an orthodoxy.

A major challenge to this orthodoxy, to what were described as Western 'misconceptions' about Indian art, the 'fixed idea . . . that everything really great in Indian art has been suggested or introduced by foreigners',

came from E.B. Havell, Superintendent of the Government School of Art, Calcutta, from 1896 to 1906. Havell was the author of a number of influential works on Indian sculpture, painting and architecture,[93] and began his *Indian Architecture* with a polemic against Fergusson and colonial archaeology for their judgements on Indian art. He believed these were formed according to a European classicist canon, which was assumed to stand for a universally perfect taste. Indian art, Havell argued, needed to be understood and judged from within the tradition. This tradition was identified with 'Aryan philosophy',[94] whose essence was held to permeate every aspect of creative enterprise throughout Indian history. The Platonic notion of a transcendental Idea, which stood for an inner truth sometimes belied by material appearances, was used by Havell as an effective analytic device to build a bridge between Greek philosophy and the Vedic concept of *maya*.[95] The notion of 'Indianness', a unitary essence, created by Havell to characterise the art of the subcontinent, had a definite bearing upon his analysis of Indian architecture following the Turkish conquest. Indian, in his analytical schemes came to be synonymous with a pristine Vedic tradition, a creative force that impregnated all of Indian art, 'until at last Arab, Persian and Central Asian art lost their own individual identities . . . and merged into different local phases of Indian art of which the aesthetic basis was essentially Hindu . . .'[96]

Havell indeed goes on to argue that the Saracenic art which came into India had been Indianised before it crossed the Indus.[97] He thus makes a case for the Indian origins of arcuate methods of construction through the example of the pointed arch which, he argues, was adopted by the Arabs in the course of their contacts with the Buddhists of Central Asia. A similar argument is proffered in the case of the dome of the Taj Mahal, whose bulbous form and structural arrangement have been described as 'not Saracenic but essentially Hindu', for their origins, Havell asserts, go back to a much older tradition, an example of which could be found in one of the Saivite shrines of Chandi Sewa at Prambanam in Java, built in the eleventh century.[98] 'It must be remembered', he writes elsewhere, 'that comparatively few of the master-builders who actually constructed the most famous examples of Mogul architecture were Muhammadans. The remarkable decline of the Mogul style which set in under Aurangzib was largely due to his bigotry in refusing to employ any but true believers.'[99]

A concern with origins and essences pervades Havell's text with a quasi-obsessive consistency; it functions, in fact, as a central organising

principle of the book. The first two chapters are thematic, dealing with fundamental questions of 'Hindu and Saracenic art', the 'Pointed Arch', 'Hindu Symbolism', and the origins of the design and structural characteristics of the Taj Mahal. These furnish a paradigm of sorts which informs the next three chapters, now set within a chronological-cum-regional frame. Then follows another thematic chapter focusing on the Indianness of the elements of medieval architecture—'Indian Arches', 'The Hindu Temple', '*Sikhara*', Brackets, Capitals and Domes. The rest of the book is once more organised according to chronology and the regions of the subcontinent, all read as case studies illustrating certain central tenets and convictions.

In spite of his polemical critique of Fergusson's use of racial or ethnic categories to explain stylistic evolution within Indian architecture, Havell's overweening preoccupation with a mythical Aryan ideal which was all-encompassing and powerful enough to subsume different phases of Indian art, rested on similar Orientalist and racial presuppositions.[100] At the same time, his critique of British ignorance and their consequent denigration of Indian art rendered Havell's vision of India's artistic herittage highly attractive to a nascent nationalist intelligentsia, whose own responses to colonial interpretations of Indian architecture continued to rest on the essentialising assumptions of this particular vintage of Orientalist writing. And finally, this bland conflation of an 'Indian' tradition with a singular Vedic Hinduism has lent itself to easy appropriation by more contemporary communal ideologies whose interpretations of medieval Indian architecture continue to assume virulent forms into the present, not least by transgressing the bounds of academic discipline.

A second, though less polemical, challenge to Fergusson's orthodoxy came from the investigations of the French scholar Gabriel Jouveau-Dubreuil, whose study in two volumes of the architecture and sculpture of the Tamil region was published in 1914.[101] The first of these volumes deals primarily with temple architecture, for which the author worked out a different principle of classification, and which contributed to a reappraisal of Fergusson's chronology as well as his fundamentally negative evaluation of style. For Jouveau-Dubreuil a comparative study of ornament provided the key to the classification of architectural laws and styles. In addition, he drew upon the evidence of inscriptions to establish a chronological order within which he proceeded to trace, in an evolutionary framework, the development of styles, classified according to dynastic labels. Influential as Jouveau-Dubreuil's methods and findings remained for subsequent scholarship on the temple architecture of this

region, a shortcoming in his work is generally considered to be an excessive and quasi-exclusive reliance on decorative form per se,[102] a shortcoming which provided a point of departure to the art historian Ananda Coomaraswamy for detailed investigations into what he termed the 'inner meanings' of forms.[103]

The valuable groundwork for the study of Indian architecture laid by Fergusson and Havell provided an impulse to a number of enterprises in the early twentieth century. As early as 1846 Fergusson had expressed a concern to preserve ancient monuments from decay and vandalism.[104] Several writings on architecture from the 1880s were linked to programmes of conservation pioneered by the Archaeological Survey of India since the time Fergusson's disciple, James Burgess, succeeded Alexander Cunningham as Director of the Survey in March 1886. This was also the period when H.H. Cole, Curator of Ancient Monuments from 1880 to 1883, embarked on a project to survey and prepare lists and descriptions of monuments: ten folio-volumes were prepared during the 1880s containing descriptions, plans and illustrations of some of the major monuments Cole had got surveyed.[105] As conservation continued to be a central preoccupation of the Archaeological Survey of India under the successors of Burgess, especially under John Marshall, the publishing of annual reports of architectural surveys of sites and monumental complexes all over the subcontinent came to be considerably systematised. From 1902–3 till 1938, *Annual Reports* dealing with three subjects—conservation, epigraphy, 'exploration and research'—appeared regularly.[106] In addition, a separate series entitled *Memoirs of the Archaeolpgical Survey of India*, published from 1919, furnished a mass of documentation on architectural remains.

J.A. Page's *A Historical Memoir on the Qutb* in this series was published by the Archaeological Survey of India as Memoir no. 22 in 1926.[107] Page's 'descriptive account' of the complex of structures which formed part of Delhi's first *masjid-i jāma*, popularly called the Qutb complex, is accompanied by detailed plans and drawings seeking to reconstruct the different stages during which the masjid and its adjoining structures came into being. In addition, the *Memoir* carries a transcription and English translation of the Arabic and Persian epigraph inscribed on the monuments and, finally, a resume of excavation and conservation work carried out at the complex since 1910.

Page's reliance on Cunningham's *Report* and Fergusson's *History* is evident throughout his account. He viewed the buildings as exemplary of the earliest encounter between 'Saracenic' and 'Hindu' architecture,

demonstrating the ways in which the former both absorbed and resisted the 'influence' of 'Hindu forms'. These processes are studied through an enumeration of stylistic elements such as the perfection, or lack of it, of arcuate building techniques and the forms of surface decoration. The search for origins informs the main historical and stylistic concerns, especially accounts of the section dealing with the Qutb Minar, where genealogical links with prototypes in Ghazni or more distant precedents in Persia or Egypt are speculated upon. The question of 'which people built the Qutb Minar, the Hindus or Muslims' seems to have assumed the proportions of a charged debate in the wake of writings by Cunningham, Fergusson, Page, Fanshawe and others, as can be read in S.K. Banerji's resume of the arguments and positions.[108] Page's *Memoir* has, however, left behind a more persistent legacy for subsequent research on Delhi's first *masjid-i jāma*. His account, at the very outset, informs the reader of the demolition of a Hindu temple which had originally stood on the site where the mosque was then constructed. The description goes on, not merely to point to the use of building material from this and twenty-seven other temples of the vicinity for the construction of the mosque, but also, through detailed plans, sets out 'evidence' to show the extent to which 'the mosque embodied in itself a definite portion of that structure, up to the plinth level'.[109] Neither Page, nor any of the modern historians who have proceeded to study the masjid, especially those drawing upon Page's interpretation of this structure as an architectural expression of 'Muslim victory' over 'infidels',[110] have cared to pose the question of the specific ways in which this material was actually reworked into the structure of the mosque and the implications of this process for the possible plurality of meanings it could yield to different modes of viewing and perceiving.[111]

More significant is the fact that the analytical framework evolved in colonial studies on medieval Indian architecture, notably by Fergusson and Havell, has proved to be tenacious, informing studies of Indian architecture well into the present. To begin with, the dynastic framework—which Percy Brown subsequently endowed with a formalistic rigour—continues to be the organising principle for almost all modern writings, notably surveys, of the history of medieval Indian architecture.[112] Brown also took over a number of aesthetic judgements propounded by Fergusson and Smith. These permeate his entire work: for instance, the intrinsic aesthetic superiority of arcuate over trabeate forms, the former emanating from forms and techniques in Roman buildings. Brown often voices opinions rooted in an uncritical appropriation of contemporary

chronicles, as in the case where he approvingly cites the historian of Shah Jahan's reign, Lahori, to denigrate the architectural creations of Shah Jahan's predecessors as 'abominations' or 'almost barbaric' in comparison to the 'noble' or 'graceful' or 'elegant' edifices of a reign where 'Mughal architecture undoubtedly found its golden age'.[113] Brown's pronouncements at times imply a certain climatic determinism characteristic of colonial writings; they were echoed by subsequent writers such as Mortimer Wheeler who, in characteristically flowery language, described the architecture of the Indian subcontinent as an expression of the 'austerity of the desert' tempering the 'luxuriance of the jungle'.[114] The legacy of Fergusson, systematised by Brown, meant that styles or periods did not merely correspond to dynastic divisions, they were often translations in stone of the character traits or predilections of individual personalities. Akbar's tolerance and sympathies with 'Indian culture' accounted for 'unorthodox intrusions' such as trabeate forms or 'Hindu' decorative motifs within the buildings of his reign; Jahangir's reign is teleologically designated a 'period of inertia' before the 'Mughal style' attained its 'zenith' under Shah Jahan. Akbar's mausoleum at Sikandra is described as 'unimpressive' and lacking in coherence owing to Jahangir's 'spasmodic supervision' of the construction (an outcome of his alleged lack of interest in architecture).[115] Many of Brown's errors made in the attribution of buildings have been rectified by more recent research,[116] and the crassest of his judgements have been discarded. Yet some of the deeper implications of his framework continue to be unthinkingly regurgitated. Relatively little effort has been made to understand the question of formal stylistic categories as constructs, as scholarly inventions which we impose on the past in order to create coherent and seemingly meaningful patterns of development. While the importance of style per se ought not to be negated, processes of classification would need to take account of apparent inconsistencies and complexities that emerge, for instance, when building practices of the imperial centre are confronted with those of the regions.[117]

Orientalist imaginings often continued to permeate Indological writings through the 1950s. One example is the article by Hermann Goetz, reprinted in this volume, focusing on the eighteenth century, on the buildings of the Qudsia Bagh in Delhi. Goetz's readings mechanically apply aesthetic categories and judgements characteristic of certain kinds of stylistic histories of European art. They have not been able to avoid falling into the trap of certain well-worn clichés. The architecture of this complex is seen to mark a 'turning point' in the development of

medieval Indian architecture: from the 'consummation of the Baroque trend' characteristic of 'classic' Mughal architecture under Shah Jahan to its transformation into the 'gay, frivolous Rococo' of the eighteenth century. This phenomenon is further interpreted as marking a decisive step towards a 'Hinduisation' of Mughal art. Finally, Goetz's description of Qudsia Begum, patron of these edifices, is replete with racial categories and moral overtones that make up a dark, mysterious, feminine and tantalising Orient redolent with sexuality.

III

The earliest nationalist reactions to colonial architectural history were attempts at contesting some of the most evident forms of colonial prejudice. Racial or climatic determinism, or the dismissal of Indian art as a whole through a denigration of forms which did not measure up to European canons of aesthetic worth, were now critiqued. Colonial crassness, expressed through terms such as 'barbarity' and 'monstrosity', or through the notion of 'backward decline', were often responded to by leaning on another form of Orientalist interpretation—the more sympathetic judgements of Havell. In the process, nationalist interpretations imbibed its specific canons, such as the privileging of 'Hindu' traditions. Writings of this kind became linked to a search for myths of origin which might furnish underpinnings for the embryonic nation. At the same time, a number of studies—borrowing from the vast corpus of colonial material and drawing upon historical studies imbibed through colonial education—sought to bring to light those structures relatively neglected in colonial writings, such as the monuments of Aurangzeb's reign, those built by Sher Shah, and examples of late Mughal architecture earlier dismissed as 'decaying'.[118]

Another distinctive aspect of such nationalist writings on Indian architecture was the attempt to overcome some of the limitations of colonial studies by using written sources—inscriptions, architectural treatises, religious texts—as well as living architects and craftsmen while arriving at a fuller understanding of monuments. It was during this period that scholars of Indology, Sanskrit and Persian were associated with the Archaeological Survey and its research projects. Among these was Maulvi Zafar Hasan, who authored a number of the *Memoirs* of the Archaeological Survey of India, of which the one dealing with the Nizamuddin complex is the most well known.[119] Zafar Hasan's dependence on Fergusson's painstaking collection of information, as also on the

latter's structural characterisations of buildings, is evident. However, his *Memoirs* also provide a transcription and translation of the Arabic and Persian inscriptions on the monuments. Unlike Fergusson, Zafar Hasan's meticulous enumeration of individual features is more in the tradition of an archaeological inventory; there are few incursions into questions of style or elucidations of the aesthetic or functional dimensions of the monuments described. His account of buildings in the Nizamuddin complex draws upon a range of contemporary sources, mainly Persian chronicles, to reconstruct their history. History, here, is taken to mean a chronology of the construction of the various structures. The author also furnishes biographical details of individuals connected with these monuments: in the case of Shaikh Nizamuddin Auliya he ends up recycling accounts from contemporary hagiographical literature, while for Shaikh Abdu-n Nabi it is mainly Abu'l Fazl and Badayuni upon whose histories he depends.

The 'historical' sections of the *Memoirs* exist mainly as appendages to the descriptive accounts, they do not lend much analytic depth to those accounts. We learn little about the histories of the monuments, their patronage, construction, uses, etc. Yet these writings fulfilled an important function—of assisting in conservation, which included commenting on the condition of the buildings and making suggestions for their protection and preservation. Zafar Hasan's *Memoir* on Nizamuddin is one of the best available sources for descriptive and chronological information about structures that were being continuously added to till the end of the Mughal period. As the disintegration of these structures has rapidly increased with modern encroachments, the *Memoirs* are invaluable in enabling us to reconstruct the topography and architecture of the sites.

During its early phases, nationalist scholarship launched a multi-pronged attack against the Eurocentricism of colonial writings. Here the question of Graeco-Roman influence was a major theme of contention; the nationalist response to colonial claims took the form of a search for an autonomous and quintessential 'Indian' tradition whose roots stretched deep into a pre-colonial past.[120] The early writings of the aesthete and art historian Ananda K. Coomaraswamy deployed an impressive scholarly apparatus to intervene in such debates. One example is a forcefully argued article on the origins of the Buddha image, in which Coomaraswamy sought to demonstrate that there existed an older and richer tradition of Buddhist art which could scarcely be designated as 'derivative' of Gandhara. Rather, this tradition, spanning over three hundred years,

yielded an array of powerful Buddha images 'deeply rooted in an Indian tradition'.[121]

While this initial phase of nationalist historiography was characterised by a strong link with the more benevolent forms of Orientalist writings, notably those of Havell, it would be less than fair to place Coomaraswamy's voluminous writings under a single Orientalist umbrella. His continuous pursuit to bring together the analysis of texts and forms yielded a useful compilation of architectural terms in which linguistic and architectural skills were deployed to unravel not only the technical meanings of terms, but also their significance at a symbolic level.[122] Coomaraswamy's writings on Indian architecture registered a progressive shift from the investigation of 'influence' to that of 'iconography' or 'inner meaning' of architectural form. It was not sufficient, he argued, to study architectural forms from a technical or functional perspective alone: the 'significance' of those forms was indissociable from their structural characteristics. A temple was more than a simple place of worship, its forms stood for an image of the cosmos; the enactment of rituals was built into its spatial organisation and structures.[123] Impelled by the need to counteract colonial denigrations of the motifs of Indian art as 'monstrosities' and products of 'strange fantasies', the writings of Coomaraswamy explored the realm of iconographic and iconological analysis. 'Ornament', designated by the Sanskrit term *alaṁkāra*, was understood as being more than 'merely aesthetic' or 'surface decoration': an intensive philological and literary analysis of the term led him to read many layers that went into the making of it meanings—'empowering', 'nourishing', or effecting a 'completion' of an artefact.[124] The evolution and significance of popular cosmological motifs like the lotus or the *kalaśa*, present in architectural creations across time and the geography of the subcontinent, were meticulously explained and situated within the study of architectural form and style.

Structural form in architecture, according to Coomaraswamy, has often been studied from either a 'functional' or an 'aesthetic' point of view. The distinction between the two, function and meaning, he argues, is in fact an artificial one.[125] In his approach, that which he designates a 'technical' question presents itself only at the juncture when an already imagined or conceptualised form has to be realised in material. The dome as an architectural form has been considered by Coomaraswamy 'primarily as a work of the imagination, and only secondarily as a technical achievement'. He defends himself against the charge of

'reading meanings into works of art' by arguing that divisions between symbolic content and material utility, or between 'applied' and 'fine', 'industrial' and 'decorative' arts, all belong to the present and would have been unintelligible to traditional societies, in which that which was symbolised constituted 'the archetype and raison d'être of the thing itself, and in this sense its only final explanation'. The key of iconographic analysis, in Coomaraswamy's method, lay in the study of texts—primarily Vedic and Buddhist literature—which he subjects to a rigorous philological analysis in order to unearth deeper strata of meanings. Modern writings on Indian architecture, as discussed in the following section, have continued to draw upon iconographical methods, though showing more careful attention to questions of historical contexts as a counterfoil to the essentialising tendencies in many of Coomaraswamy's writings.

Certain forms of nationalist writings were marked by a concern with uncovering indigenous sources of talent, the need to recover individual artists from anonymity. The article by M. Abdullah Chaghtai reproduced here attempts to trace the history of a particular family whose individual members included outstanding architects, engineers, calligraphers, astronomers and poets. Chaghtai's investigation draws upon a range of sources—inscriptional evidence, Persian manuscripts, gazetteers and learned treatises—all of which establish the rigour of his scholarship and his training in positivistic method. The individual personalities studied here, especially Lutf Allah, 'surnamed *Muhandis* (engineer), the son of *ustād* Ahmad *Mi'mār* (architect) of Lahore', would appear to fulfil the Renaissance ideal of a many-faceted intellect: in addition to being a poet, calligrapher and astronomer, he has been described as 'a great engineer, architect and mathematician as well as a man of great literary attainments', suggesting a new social model of the artist as 'genius'.

The myth of a pre-colonial Golden Age found particular resonance in one stream of 'secular' nationalist writings. These were concerned with countering interpretations of medieval India as a period which witnessed the forcible spread of Islam upon a peace-loving, tolerant Hindu populace. Exponents of this position sought to read all building activity during the centuries of 'Muslim rule' as an expression of the iconoclastic zeal of a 'foreign culture' seeking to superimpose itself within the Indian environment by a violent effacement of indigenous structures and traditions. The 'secular nationalist' response to such a separatist or 'communal' interpretation found expression in the notion of a 'synthesis', a

spontaneous blending of two styles'.[126] The natural fusion of the best features of 'Hindu' and 'Muslim' styles, a description which had its roots in Fergusson's analysis, was to become a powerful and enduring explanatory trope in a large number of writings.[127] The harmonious coexistence of elements drawn from two allegedly opposed religious traditions within the structure of a single building came to function as a mimetic device denoting a pre-colonial Arcadia. Mujeeb's article on the Qutb complex exemplifies this historiographical tradition. The architectural creations within this complex of buildings furnish, according to the author, evidence of the more tenacious strength and eventual success of forces that worked for 'harmony and understanding', following, and thereby counteracting, the violence of conquest. While the desecration of temples and the subsequent deployment of their material for constructing the mosque (testified to by the inscription on the northern portal) is deecried on moral grounds as an act of warfare, the ensuing structures are said to owe their 'existing novelty' to the fact of their being a creation of artisans steeped in Hindu 'architectural values', but responding to the dictates of an aesthetic introduced by their new patrons. The co-operation of Muslim architects and Hindu master-masons engendered a style which Mujeeb describes as a successful fusion of architecture and sculpture. The experience, moreover, points to the resilience of an abstract notion of beauty which 'can enable us to overcome our imperfections and realise the underlying unity of all art. The Qutb complex, seen to mark the beginning of this movement towards unity and fusion, was followed by experiments such as those of the Tughluq sultans which were, in Mujeeb's view, regressive for having privileged 'pure architecture' over sculpture. It was only under Akbar who 'brought artisans together from all parts of India to build Fatehpur Sikri', that the 'harmonious assemblage of different styles' was consummated.

One enduring legacy, then, of the earliest attempts to locate the study of Indian architecture within a disciplinary framework has been what Marc Bloch termed 'le hantise des origines', a preoccupation with the origins of forms. The search for and identification of sources as an end in itself could be described as the leitmotif of a large body of writings on the subject, whose paradigms, often irrespective of their position on the intellectual and political spectrum, draw in substantial measure upon the writings of Fergusson and Havell. Once the sources of forms, often selectively singled out from within a building, were identified as Hindu, Buddhist, Jain or Muslim, they were believed to be capable of providing

a key to the meaning of that structure. At one level of analysis, the choice of these elements was read as an extension of the personalities of the patron: at its crudest, this would mean that the architecture of Akbar's reign would reflect his putatively liberal, generous, dynamic or virile personality, explaining thereby his preference for sandstone as a building material and the predominance of Hindu elements in the buildings commissioned by him. Shah Jahan's pleasure-loving and more 'effeminate' character was apparently expressed through his predilection for marble as a building material and for vegetal and floral forms of decor. Aurangzeb's orthodoxy and austere temperament meant not only a decline in patronage but also an 'Islamisation of the Mughal style', implying its degeneration.[128] At another level, the search for sources has led to tangled disputes about symbols and structures, whether they were originally Hindu before other traditions took them over.[129] The flaring up of religious conflicts in contemporary India, in the wake of a resurgent and militant Hindu Right, has meant that questions of this kind have acquired a particularly virulent resonance. The history of architecture is, in our own time, being deployed to legitimise desecration and violence.

The search for sources becomes in effect a search for essences. The construction of categories as Hindu or Muslim implies that these denote qualities which are fixed, unitary and unchanging. It is blandly assumed that each of these stood for uniform attributes across the geography of the subcontinent, ignoring that in fact the terms Hindu and Muslim have acquired multilayered accretions and variations through interaction with innumerable traditions, grand and little, regional, sectarian and tribal, all of which then infused forms and styles. Further, the legacy of colonial procedures such as classifying, labelling and categorising, upheld as important hallmarks of disciplinary rigour, has generated its own variety of essentialism in that the focus of study has frequently been to define the 'characteristic features' of dynastic building styles or of architectural genres, each viewed as a stable entity or archetype—for example, the mosque or the mausoleum or the 'Mughal garden'. This mode of elaborating typologies as an end in itself can become an obstacle to engaging with the rich and diverse histories of medieval buildings. Historicising the study of architecture would mean viewing form and structure as dynamic entities, as entities that not merely responded to historical phenomena but that were in themselves historical creations, and therefore subject to adaptation, change, resistance, or subversion. Equally, it would mean allowing architectural creations the potential to act upon history: by providing an arena for a range of activities of groups and individuals, of men and women, architecture intervened in the constitution of relationships and identities among its users. In this manner architecture could be seen as participating centrally in processes of state-formation, in the building and consolidation of empires.

IV

During the 1970s the discipline of art history grew increasingly self-conscious about its theoretical assumptions. The field now extended to cover a range of 'artefacts', including buildings and cities, as well as figurative and non-figurative historical objects across the globe. A basic working assumption of most art historians, namely that the history of art is synonymous with the history of style, was applied equally to the study of architecture. This assumption, born with the discipline, has occasionally been challenged but never really dismantled or undermined. When art history became a learned discipline in Germany during the mid nineteenth century, it was attracted, somewhat incongruously, both towards Rankean positivism and Hegelian philosophy. The positivist tradition, resting on the values of Renaissance humanism and Neoplatonic idealism, identified aesthetic value with individual 'creativity', which helped to demarcate artists from craftsmen and so ascribed to art a more exalted position alongside the traditional 'liberal arts'. In Hegelian theory, history unfolds in response to an immanent Spirit or Will. Inasmuch as this theory perceives the artist as drawn by superior forces to accord with the spirit of the time and place (the *Zeitgeist*), it appears incompatible with a concept of individuality and the uniqueness of the creative act.[130] Yet a focus on the creative act has continued to coexist with a focus on historical evolution, on changes within the characteristics of works, on developments often characterised as 'movements', and on individual works which are believed to effect and further these changes.

During the mid-nineteenth century and well into the twentieth, art, together with literature, ideas, symbols, concepts and styles, made up a notion of culture which seemed self-explanatory to distinguished practitioners of its history, such as Jakob Burckhardt and Johan Huizinga, who wrote elegant and evocative accounts of 'the culture of the Renaissance' and of 'the spirit of the Middle Ages'.[131] The assumption of unity which formed one of the underpinnings of these enterprises found its fullest expression in the mammoth civilisational histories of Toynbee and Spengler.[132] The former organised the twelve volumes of his *A Study of History* around twenty-six different 'civilisations'. His cultural focus

was on the 'classics', or the canon of 'great works'. Often contained within a hermetically sealed analytical space, these transmitted 'eternal' values. Moreover, being postulated on the Hegelian notion of a *Zeitgeist*, Toynbee's work assumed culture to be a consensual and homogeneous entity within a given social formation, 'tradition' as the transmission of objects, practices, motifs, symbols and beliefs from one generation to another. The capacity to recognise artistic quality or 'truths' was regarded as intrinsic to the cultural make-up of selected individuals, and such cultural history was written for, as well as about, European élites, beginning with the Greeks. Culture came to be defined as something which some groups in certain societies possessed and others lacked.

A fundamental critique of this approach to the history of art and culture came from a Marxist position. It was vigorously articulated during the late 1940s and early 1950s in the writings of three refugees from Central Europe based in London—Frederick Antal, Francis Klingender and Arnold Hauser.[133] This perspective inaugurated what, following Hauser, came to be described as the 'social history of art', an art history premised on the conviction that all cultural creations are social products. All meaningful analysis of these establishes their links with the economic foundations, political ideologies and social structures of the contexts within which they emerge. Changing styles, for example, as in Hauser's four-volume work, came to be explained as a cultural response of particular classes to socio-economic processes and developments—mercantilism, urbanisation, the growth of technology. Styles and forms were read as 'reflecting' the worldviews and interests of classes and groups which, in turn, 'used' art—buildings, paintings, literary works—to enhance their status and pursue social goals. The conditions of cultural production became objects of scholarly study—forms of patronage, the institution of art criticism, the role of politics. And yet this mode of analysis succumbed, as was characteristic of much early Marxism, to a mechanistic determinism postulating straightforward relationships between art and society, generous in its attributions of causality. Society here often appears as a painted stage-set, a tableau of social groups, economic facts and political events which 'inform' works of art and, in some unexamined way, transform them.

A corrective to the overly deterministic understanding of culture came, to begin with, from within the Marxist fold, from a critically recast, nuanced, non-reductive and empirically rigorous application of Marxist theories. The writings of Timothy J. Clark, John Barrell, Pierre

Francastel and Griselda Pollock were among the most significant.[134] Clark's essay 'On the Social History of Art' is one significant moment in the emergence of this more dynamic art history. Clark begins by ruling down the notion of works of art 'reflecting' ideologies, social relations or history, of 'history as "background" to the work of art—as something which is essentially absent from the work of art and its production, but which occasionally puts in an appearance', or of a 'social history of art . . . depend[ing] on intuitive analogies between form and ideological content . . .' Instead, his agenda is to explain 'the connecting links between artistic form, the available systems of visual representation, the current theories of art, other ideologies, social classes and more general historical structures and processes'.[135] In such an analytical mould, the facile notion of 'reflection' is no longer allowed: cultural forms do not simply stand for the social in some unmediated way. Rather they *re-present* it in the codes and processes of signification built into the specific language of a genre. Far from reflecting an already given social world, art and cultural forms are now perceived as participating in the production of that world. Finally, included in such an agenda are the more empirical aspects of a social history of art: 'patronage, sales, criticism and public opinion'. The serious investigation of these meant that sojourns in dusty archives would henceforth have to be part of the art historian's research routine. In effect, a comprehensive project for art history was invested with the ability to rescue the discipline from its 'illustrative' status. At the same time this made it possible for 'mainstream history' to enlarge its field of documentation and modes of reading.

The efforts of Clark and others to revitalise art history can be located within a larger caesura—the inception of 'cultural studies' in Britain, and subsequent developments in the 1960s and 1970s. Broad explorations of culture's political functions and critiques of its hegemonic effects contributed to defining issues in the field by Raymond Williams and E.P. Thompson.[136] In one of the earliest definitions that sought to reject the humanist position (which viewed culture as a distillation of all that was best in a given civilisation) Raymond Williams proffered a more socialised concept. Here, culture was related to the sum of available descriptions through which societies make sense of and articulate their common experiences. Art no longer enjoys a privileged position in this scheme of things as a touchstone of the highest values of civilisation. Rather, its multifarious productions—painting, architecture or works of literature—are now redefined and integrated within a larger social process

> which creates conventions and institutions, through which the meanings that are valued by the community are shared and made active . . . art is there, as an activity with the production, the trading, the politics, the raising of families. To study the relations adequately we must study them actively, seeing all activities as particular and contemporary forms of human energy.[137]

While Williams' efforts to undermine an idealist 'civilising' definition of culture have been pointed out, his definitions are also consciously pitched against certain kinds of Marxism, against the literal operations of the base–superstructure metaphor, wherein the domain of culture and of meanings was denied its own social life.[138]

A second formative moment comes with the writings of E.P. Thompson. In a critique of Williams' *The Long Revolution*, Thompson argues that no 'whole way of life' is without its dimension of struggle and confrontation between opposed ways of life.[139] His seminal definition of plebeian culture is encapsulated at the beginning of *Customs in Common*: to be meaningful the concept could no longer remain 'situated in the thin air of "meanings, attitudes and values", but [had to be] located within a particular equilibrium of social relations, a working environment of exploitation and resistance to exploitation, of relations of power that are masked by the ritual of paternalism and deference'.[140] Taken together, the writings of Thompson and Williams succeeded in furnishing a two-fold meaningful and distinctive conceptualisation of culture: first, the meanings, beliefs and values which emerge within particular social groups and classes through their historical conditions and relationships. Second, as lived traditions and practices through which those meanings and beliefs are expressed and embodied. This strand within cultural studies continues to furnish useful perspectives and insights, preserving a distinctive humanist position as against the more extreme deconstructive forms of postmodernism.[141]

Writings on the history of Indian architecture from the late 1970s, emanating as many of them did from academic establishments in the West, can be located in some way or the other within the broad context of the far-reaching theoretical transformations sketched above. One important strand in the application of critical strategies to the interpretation of varying artistic genres was an analysis of form, both as a basis of interpretation and point of departure. In other words, historians of medieval Indian architecture today are explicit about the need to contextualise the study of form, to enable an understanding of architectural styles within the conceptual framework of the visual traditions and socio-political settings within which they were produced. Here the debt

to the Panofskian principles of iconographic and iconological analysis is unmistakable. Among the earliest art historians who understood art beyond the conventions of formalist aesthetics, Erwin Panofsky invoked a notion of 'cultural meaning', a meaning which went beyond the details of architectural style or even artistic intention—be it of the patron or the artist—to a range of broader intellectual and cultural configurations. Iconography and iconology were two primary analytic categories which enabled the location of artistic creations within a 'spatio-temporal realm' or context.[142] The iconography of a work implies a set of attributes or signs whose meanings are derived from artistic as well as textual sources; defining and locating the meanings of symbolic form within a particular tradition and tracing the way these evolved over space and time becomes, in this manner, one way of contextualising a work of art. The adjunct notion of iconology is an equally historical approach that conceives of the visual arts as part of a larger 'universe of culture', a system of meaning connecting artistic creations to a broader correlate of perceptions and representations—for example taste, conceptions of space, religious experience, and so on. While Panofsky's intellectual efforts were devoted to the study of Western art and were confined to a certain aesthetic canon encompassing the 'high arts', the principles of meaning and analysis invoked within his oeuvre have shown themselves to be encompassing and universalisable.

Stripped of their rhetoric and humanist predilections, Panofskian methods have been adapted to the study of many traditions, fields and genres. In recent years, studies of medieval Indian architecture have opened up significant areas of enquiry and research. Viewing styles, representations and artistic canons as intrinsically historical has meant examining patronage and programmes, power and its ideologies, and the movements of artisans, techniques and traditions over broad areas. The frontiers of the medieval world have been perceived as transcending the geographical limits of the Indian subcontinent. In other words, Panofsky's definition of 'context', once established as a general principle, has been extended and refined to incorporate a range of subjects and considerations. The studies included in the present volume can be grouped under three broad areas of recent research: an analysis of symbolic forms and motifs; an interpretation of patterns of patronage; and the study of regions.

In the first area, historians such as Ebba Koch, Michael Meister, Wayne Begley and Glenn D. Lowry have worked their way through more or less systematic iconographic readings of buildings and their

visual programme by looking at traditions of representation, and the evolution, borrowing and reworking of forms, motifs and symbols to arrive at an understanding of the meanings transmitted by these structures.[143] They have been, by and large, conscious of avoiding some of the pitfalls of the iconological method which could either lead to an overly speculative interpretation not easily justifiable in historical terms, or alternatively which could result in a kind of 'contextual' architectural history in which the interpreter's task stops once the work is embedded in its historical setting, eluding interpretation altogether. Such studies work towards fleshing out the connections and points of intersection between architecture and other dimensions of the cultures of medieval Indian politics, of which they formed a part. In doing so these writings have been able to bring synchronic explanations to bear upon our perception of art historical change. In the final analysis, writings of this historiographical stream perceive the terrain of the art historian as shaped by the complexities of human choice and motivation.

One example of this historiographical mode is Michael Meister's study of the *Aḍhāi Din kā Jhomprā*, the mosque at Ajmer built at the end of the twelfth century by the Turkish conquerors of northern India, following the construction of the *masjid-i jāma* at Delhi.[144] This study provides an example of how 'invading cultures' interact. As he is interested in underscoring the interpretive potential of visual forms, he draws upon stylistic elements—motifs, arch forms, building techniques—to arrive at certain conclusions. The materials used in the Ajmer mosque were both plundered and new, enabling a 'balancing' of styles and imparting to the ensemble a greater sense of 'order' as compared to what the author, somewhat subjectively, describes as the 'disorderly' character of rebuilding in Delhi's mosque. By linking motifs and forms to specific sources or 'origins'—for example Kufic patterns to Islamic Turkestan or other motifs to 'Hindu' patterns at Nagda or Gwalior—Meister argues that Hindu artisans had access to both traditions, their own and those provided by Islamic patrons. In order to respond creatively or 'empathetically' to a fresh set of demands, they sought to tap certain possibilities within local traditions for which the demand for a different kind of structure acted as a catalyst. The strength of Meister's argument lies in the way he addresses the question of form: though concerned with sources, his analysis does not stop there. Rather, he attempts to locate the uses of tradition within historical processes of conquest and the interaction of politically antagonistic cultures. His conclusions are more

in the nature of a hypothesis; they could be more fully fleshed out if the study of forms were pushed further and embedded within broader historical parameters.

A masterly example of the use of iconographic analysis to unravel the historical meanings of architectural works is Wayne Begley's study of the Taj Mahal, perhaps one of the most original and erudite pieces of writing on Mughal architecture in recent years.[145] While existing accounts of the Taj have viewed it within a largely evolutionary frame—as part of a continuing stylistic tradition of building royal mausolea from Timurid to Mughal architecture—Begley considers this narrowly 'formalist approach' insufficient to understand the intrinsic symbolic meanings of the monument. To arrive at these he draws upon the evidence of the tomb itself—the plan of the entire complex and the calligraphic programme of the monument, categories of evidence which, according to the author, scholarship on the Taj has neglected. This analysis enables him to recover for the Taj 'an allegorical significance going far beyond its literal funerary function, a significance which . . . is nonetheless appropriate to that primary function'.[146] Drawing upon an array of sources—Sufi treatises, cosmological diagrams, paintings, plans and manuscripts scattered over the globe—Begley interprets the apocalyptic imagery that runs through the Quranic inscriptions on the gateway and the tomb as suggesting 'that the monument was conceived as a vast allegory of the Day of Resurrection, when the dead shall arise and proceed to the place of Judgement beneath the Divine Throne'.[147] His analysis of cosmological texts and diagrams suggests that, from an early date, diagrammatic and figurative traditions were often indissociable, and that these materials then furnished an iconographic tradition of representing the 'Divine Throne', picked up by the architects of the Taj. Begley locates a close iconographic parallel to the Taj's allegorical conception in a diagram contained in Ibn al-'Arabi's *Futuhāt al-Makiyya*. Tracing the history of this text, he brings to light the fact that a copy of this manuscript had belonged to Jahangir, who had presented it to a Sufi of Gujarat, whose son was a close and trusted companion of Shah Jahan and a high-ranking Mughal mansabdar. Esoteric though these eschatological and cosmological concepts may seem, Begley situates them in particular contexts—within the body of Islamic mysticism, within discussions of religious concepts in Mughal India, and within the context of a revitalisation of the doctrine of the Perfect Man by Mughal emperors who wished to harness this to crystallising notions of sovereignty. A

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further dimension of Begley's argument is an examination of the roles of the patron and architect-cum-calligrapher in the actual materialisation of an architectural conception.[148]

While Begley's study of form and meaning in Mughal architecture draws out the process by which cosmological and allegorical concepts are translated into architectural form, participating thereby in shaping notions of rulership, Ebba Koch fleshes out the connections between architecture and monarchical ideologies from another vantage point: by problematising the question of sources and borrowings of motifs and symbols from one tradition and their relocation within another context. Her work indicates methods by which the phenomena of borrowing and assimilation can be historicised. Her interest is to point to the manner in which European forms were integrated, and in the process transformed, in Mughal architecture, primarily during the reign of Shah Jahan. The methods that inform her studies make it evident that the search for and identification of sources as an end in itself does not take the historian very far; more significant is to look first for the meanings of a particular motif within the tradition from which it has been borrowed, and then to analyse the ways in which it has been absorbed and reworked within a new setting. In other words, borrowings are centrally shaped by historical processes: a process of selection is invariably at work which determines what is borrowed and what is left out, why certain regions are privileged and not others, where a particular motif is reused and at what particular historical juncture. Koch's study of the use of the baluster column in Mughal architecture, reprinted in this collection, is a rigorous investigation of the changing fortunes of a particular motif of European art which became accessible to the Mughals through engravings by Flemish artists brought by Jesuits to the Mughal court as an aid to evangelisation. This particular motif, of which prototypes were also to be found within various Indian contexts, was appropriated by the Mughal emperors because of its special meanings within a Christian iconographic tradition, meanings which they could then adapt to their own political needs and ambitions via architectural elements that fulfilled special ceremonial functions relating to the appearance of the royal persona. This trend, carried forward into other artistic genres of the time, culminated in the elaborate decorative and ideological programme of Shah Jahan's throne in the Diwan-i Am of the Red Fort in Delhi, whose history has been traced by Koch.[149] Her analysis points to the way in which symbols, images, techniques of *pietra dura* and built forms were

brought together within a *Gesamtkunstwerk* that the royal throne represented, and into which was built an ideological conception of messianic rulership.

Begley and Koch highlight the role of Mughal art in ideologies of imperial rule. For both, the reign of Shah Jahan is the focal point of research, a reign which saw the emperor's own involvement in the organisation of architectural activities to an unprecedented degree. Such work is a useful bridge between disciplines—in this case, an understanding of the dynamics of Mughal architecture seems central to processes of state-building, to the definition and consolidation of an imperial system. Koch's writings, in particular, direct the historian's attention to those political and cultural factors within which aesthetic production is inscribed. They also engender an awareness of extensive issues that could be meaningfully examined around the workings of Mughal ideology.

A central dimension of ideology is hegemonic transformations of the element of force, which is an adjunct of power, into a system of images, symbols, structures and narratives which legitimise that power. In other words a proliferation of devices—portraits, eulogies, ceremonial architecture—that represent the power of a monarchy, for instance, is calculated to produce obedience and submission without recourse to physical force. Such instruments of 'symbolic domination'[150] exist in tension with the possibility of failure of these methods to persuade. In other words, once ideology is formulated, can it afford to remain static or passive?

In Mughal architecture, mechanisms of representation follow their own specific trajectories during individual phases of the empire's history. The complex of Fatehpur Sikri was conceived of as a microcosm of the Mughal empire through reuniting within its spaces a distillation of visual and structural forms that had once belonged to regions brought under the imperial umbrella.[151] The complex has been laid out as a series of spaces, one opening on to another, as part of a sequence which seems to lead on to but does not arrive at a point of consummation. No single axis prevails, no hierarchy is generated, no clear perspective vista is created—a long way from the quiet cruciform symmetry of the quasi-contemporary tomb of Humayun. The different kinds of spaces, some open, others partially or entirely covered, rows of pillars—as in the Panch Mahal—which allow for many possible arrangements and forms of sequestering through the use of screens—all these suggest fluid movement and the flexibility of choice. The user of these spaces is never

allowed the experience of arriving at a point of centralised visual control or understanding of that microcosm, or of articulating its creator's will to power and mastery.

The persuasive modes of Shahjahani architecture, on the other hand, stand out from those of its precedents: for the Mughal emperor creating a 'paradise on earth', as evoked by the poet Amir Khusrau, meant that nature and architecture had both to serve an imperial conception in which one would seamlessly merge into the other. Water was a central unifying element in this conception. In the palace complexes of the Agra Fort and the Red Fort at Delhi, the river was both a reflecting pool and an enclosing arm: its waters permeated into the courtyards where gardens were laid around central pools. In the Delhi fort, a *Nahr-i Bihisht* wound through the area, in and out of the marble pavilions, feeding fountains and cascading water chutes. The built structures themselves seem to burst with vegetal life so that buildings and their garden surroundings could be experienced as an organic whole. In the plan of the Taj Mahal, the river was more than an enclosing mirror, it was sought to be assimilated within the built complex of garden, tomb and gardens on the opposite bank. White marble was the perfect medium through which this conception could be realised. Polished to perfection, its textures create a beauty which spells release from all that is heavy, earthbound or grossly material. This is an architectural conception of paradise that, drawing upon poetic and mythical models, bears the message of an imperial power capable of simulating the divine. The illusion of monumental imperishability seeks to transmute the fear of the passage of time and anxiety about death into splendour. A strict formalism governs not only the aesthetic programme of Shahjahani palace complexes, but equally seeks to control movement within, and the use of, these spaces.

Yet the question needs to be asked: did the nature of such striving, simulated to the point of excess towards perfection of form and symmetry, render its creations not only rigid but also fragile in the extreme? In other words, could the lack of flexibility or elasticity of this architecture, in comparison to that of an earlier period, have intensified the tension between techniques for *making people believe* and *belief itself*? With a medium like architecture, this tension is likely to be specially acute, owing to its functional character. Buildings, especially those used by large numbers of individuals, generate a dynamism of their own between users of the structure and the mechanisms or representation. The intervention of built structures and space in the everyday lives of individuals,

[illegible] their capacity to penetrate into social experience and social practices, [illegible] more easily dislocate ideological mechanisms and attempts to impose univocal understandings by introducing fresh significations through [illegible] reinterpretation, and subversion. Keeping in mind the plurality of cultural backgrounds and traditions that characterised the ruling [illegible] in Mughal India, as also the groups to whom ceremonial architecture [illegible] addressed and who related to its spaces and structures on an everyday basis, it would seem there were 'residual' or 'emergent' areas of social practice that did not articulate fully with the given regime of power and its representation. Imperial anxieties over such spaces of disobedience lay behind the efforts at well-defined forms of political ritual and notions of etiquette that would fix and stabilise social operations, and therefore guarantee efficacy to symbolic modes of political domination. It has been argued that even in the most rigidly codified absolutist polities, there always exists a gap between proposed representation and [illegible] constructed meaning, between the persuasive power of ideological forms and its possible denials.[152] Whether such issues could be meaningfully examined in the context of medieval Indian cultural practices still remains open.

To turn now to the issue of patronage. The study of architectural patronage involves more than a straightforward investigation of how buildings are commissioned. The act of patronage meant a form of transaction that defined hierarchies, established fictive ties between a patron and his artist-client, and generated ideological models of authority wherein the patron was exalted as the upholder of civilisation itself.[153] Patronage relationships were therefore interwoven within intricate patterns of authority—political power, ceremonial status and norms of etiquette. Factors of an economic, religious, political and aesthetic nature affected architectural production for it required a large-scale mobilisation of resources and labour even as it was enmeshed in processes of defining imperial authority in relation to regional cultures. Research on forms and networks of patronage in the Indian subcontinent has brought to the fore a rich variation of patterns—collective or individual, hereditary or contractual; and diversity of loci—the court, village, merchant or noble—across time and region.[154] In northern India, from the thirteenth to the eighteenth centuries, the court formed a primary locus of patronage. With Islam came certain distinctive features that characterised the authority of the patron: the patronage of artists, for example, was part of the Islamic ideal of *'adāb*, or the behaviour befitting the all-generous

king.[155] The lavish building schemes of the Mughal emperors strove towards the attainment of an ideal of beauty and perfection as a value per se, spelling the patron's powers to parallel those of divine creation.

The ideological basis of a patron's authority, be it religious, political, imperial, and at times a combination of all, was never completely rigid or unquestioned. It was often subject to such strains, tensions or pulls that marked the political systems within which patronage was exercised—conflicts centering on moral authority between the monarch and the Sufi, or the tussle for legitimacy between the imperial centre and the outlying regions, as shown in numerous studies by Catherine Asher.[156] Asher's work is probably the only attempt in this field to address the issue of patronage as a space within which a web of relationships could be woven. Her study of the building enterprises of Raja Man Singh in central India, Bihar and western Bengal highlights several dimensions of transaction and relationships which intersected at the site of architecture. Akbar, by referring to Man Singh as *farzand*, or son, established a specific, fictive kinship that bonded the nobleman to the monarch.[157] Man Singh's buildings deploying an Akbari architectural idiom in the newly acquired territories of the Mughal empire implanted within these regions a distinctive and visible presence of Mughal authority. At the same time, his architectural programme was an independent space away from the imperial centre, proclaiming his autonomy to evolve his particular definitions of artistic tradition. Patronage can thus be read as a mediating factor between questions of taste and form, a process of articulation of prestige and authority at multiple levels, a channel for an imperial presence through an architectural aesthetic. Asher's study of non-imperial patronage in its relationship to the imperial draws architecture out of a hermetically sealed space into a wider historical arena, a Panofskian universe. It is an important corrective to overly centrist perspectives on the Mughal state. It brings into focus the tension and dependence that marked interactions between the capital and its periphery, highlighting an enormous field for political ambition and symbolic assertion.

If patronage is viewed as an ensemble of iconic signs that a political order deploys for ideological ends, acts of patronage become intrinsic to the study of style. George Michell's analysis of imperial styles within courtly architecture at Vijayanagara draws attention to the highly visible presence of architectural forms and building techniques characteristic of the Bahamani period, particularly of buildings at Gulbarga, within edifices patronised by the rulers of Vijayanagara.[158] Michell argues that

while the imperial ambitions of the latter kings brought them into direct conflict with their Bahamani rivals, art forms and building activity did not automatically replicate the logic of political struggles. The presence of diverse social groups within the kingdom of Vijayanagara and the participation of many—governors and vassals of the empire, military commanders—in state rituals, necessitated an architectural idiom that could express a broader, incorporative imperial ideology. Such an architectural style, which came to bear the particular stamp of the imperial might of the Vijayanagara kings, was picked up by and continued to evolve under the patronage of subsequent dynasties—the Nayaka kings of Thanjavur, Madurai and Gingee—long after the fall of Vijayanagara.[159]

Patronage in Vijayanagara suggests the growing participation of social groups outside the court within structures of patronage and is an index of their enhanced resources and status. As part of a highly martial society from about the early sixteenth century, Nayaka kinsmen of the Nayas and military chiefs were in the throes of 'military modernisation' involving, among other things, the construction of larger fortifications.[160] Stein points to the ways in which extensive monetisation in the Vijayanagara economy renewed the importance of temples. So, along with warriors, merchants and bankers, and leaders of religious sects, all participated on an unprecedented scale in the patronage of temples. Temple activities were no longer confined to ritual celebrations of powerful kings and chiefs; temples bustled with pilgrims and sheltered an array of deities. Their patrons extended support to other institutional loci involved in the preservation and dissemination of learning—the *maṭham* being the most important part of a temple organisation—but also to individual priests and teachers.[161]

The architectural patronage of Muslim trading communities in Gujarat and along the Malabar coast, whose settlements go back to at least the tenth century, accounted for the construction of a number of monuments in these regions.[162] These monuments evolved an aesthetic idiom independent of traditions emanating from Khurasan and Central Asia which had shaped the styles of Sultanate and Mughal architecture in north India. As Shokoohy's findings reveal, many of these structures pre-date the earliest constructions of the Delhi sultans in Delhi and Ajmer; in subsequent centuries, conquests by the sultans of Delhi notwithstanding—as in the case of Ma'bar—the buildings studied suggest that they continued to draw upon examples from coastal regions, from styles and structures of non-Muslim edifices, especially from temples going back to earlier centuries. Muslim merchant communities had a

significant and substantial presence in almost all important towns along the west coast for several hundred years. The extant remnants of the monuments they commissioned—mosques, shrines, cenotaphs—are marked by a distinctive and autonomous idiom that bespeaks an attitude of tolerance towards other local communities. Shokoohy's analysis of the architectural features of mosques in Bhadreśvar points to a wide usage of indigenous structural principles and components, as also carved forms, modelled upon those of Jain and Hindu monuments of the region.[163] A striking iconographic feature is the form of the Sivalinga echoed by the column shafts in the buildings at Bhadreśvar. What seems remarkable is the attempt to dissociate this symbol, through a different form of reuse, from the memory of desecration with which it had come to be associated in Muslim minds.[164] In towns such as Calicut and Cochin, mosques built by Muslim merchant settlers reveal the use of a structural form, plan and building material different from other regions of the subcontinent. The upper storeys of mosques were constructed with timber and marked by a tiered roof form, a traditional form of building in Kerala used for many different kinds of structures, from private dwellings to temples.[165]

What of women's patronage of buildings, a largely neglected area of research? While Mughal sources are largely silent on this question, the writings of European travellers speak of women, primarily of the royal family, commissioning buildings. The most illustrious example is Nur Jahan, who had gardens, caravanserais, palaces and, most important, the gem-like tomb of her father Itimad ud-Daula to her credit.[166] An exceptionally impressive caravanserai, Serai Nur Mahal, in Jalandhar district, Punjab, bespeaks enormous resources, command over materials, labour and expertise, together with aesthetic knowledge and taste, as does the mausoleum of Itimad ud-Daula.[167] In the reign of Shah Jahan, Princess Jahanara had a caravanserai and a *ḥammām* built in Chandni Chowk, while the Fatehpuri, Akbarabadi and Sirhindi mosques in Shahjahanabad were commissioned by and named after three of the emperor's queens.[168] That this practice continued into the eighteenth century is attested to by the Qudsia Bagh palace and mosque, discussed by Goetz in this volume. Evidence from Gujarat furnishes examples of at least six imposing mosques in Ahmedabad, built during the fifteenth and early sixteenth centuries, some of whose patrons were women of the royal family.[169] Though these are stray examples, they suggest openings, institutional and financial, within the larger structures of a patriarchal society that afforded enterprising aristocratic women channels for active

participation in what remained a male sphere of activity. Patronage in itself was a significant act, a highly public form of intervention: it was a manipulation of power, not only political and economic, but over the aesthetic creation of meaning. Further research in this area will go a long way in supplementing our understanding of women's historical experience and patriarchal institutions which at present depends largely on prescriptive literature.

One of the many vital issues that cluster around the theme of patronage in medieval societies is the question of the relationship between patron, client and architect, and those who were doing the actual building—stone cutters, masons, sculptors, calligraphers. How far did the patron's involvement in planning, execution and building extend? What was the space available to the architect and individual artisan to carry out a certain conception? How were patrons and the executors of their commissions perceived within society, how did they view their own status? How far is it possible to reconstruct an account of the structures and normative frameworks within which architectural production was organised, the communities and lineages through which skills were developed and transmitted?

During the centuries preceding the Turkish conquest of northern India, centuries which saw vigorous temple-building activity, artists, architects and craftsmen were drawn from varying social backgrounds. The patrons—largely rulers or warriors—assigned the responsibility of a commission to Brahmin 'architect-priests', *achāryas* or *sthāpakas*, who exercised a dual function: the conceptualisation of a building, and, as chief architect—*sthāpati*—its execution. The *Samaranganasutradhara*, an exhaustive compendium of the visual arts compiled in the early or mid eleventh century by King Bhoja of Dhara, Malwa, laid down that a *sthapati* 'should be well-versed in all *sāstra*s, the traditional sciences . . . he should know mathematics and the Puranas, the ancient compendia of myths etc., painting . . . and [should have] crossed the ocean of the science of Vastu'.[170] With the *sthāpati* worked surveyors—*sutragrahi*—sculptors, modellers and painters. Large-scale building operations involved, in addition, unskilled labour that came from the lowest levels of the caste hierarchy.[171] Examples of building projects immediately following the Turkish conquest testify to the fact that the new rulers appropriated, as part of their conquest, the building material and labour force present there together with a particular site. The local *sthāpati* was then ordered to oversee the construction of the buildings, which then served the needs of the new patrons. The earliest structures commissioned by

the Turkish sultans, the *masjid-i jāma* at Qilā-i Rāi Pithaurā, for example, are a witness to the overwhelming presence of an indigenous building force: the *maqsura* or screen of arches framing the *qiblā liwān* was constructed according to the principle of corbelling that produced the desired arch form without deploying the true arcuate method of radiating voussoirs, still unknown to the artisans of north India. Similarly, domes were built by placing horizontal stone slabs in pyramidal form and then using mortar externally to impart a rounded form to the ensemble. A considerable degree of mobility within the medieval Islamic world meant, however, the migration of artisans and architects from the central Islamic lands to the Indian subcontinent. Many of these were fleeing Mongol depradations over their regions; others accompanied rulers, or were enslaved following military conquests of their regions.

From the fourteenth century, textual sources provide certain insights into the organisation of building activity. The evidence of a number of Mughal miniatures that portray the construction of important imperial complexes has been tapped.[172] Three terms appear in Mughal texts—*muhandis*, *me'mār* and *banna*—signifying engineer, architect and brick-layer, to distinguish between functions and professional competence. All three enjoyed a status distinct from that of the ordinary workman. A *banna*, for example, was not any brick-layer, he was a master-mason.[173] He was lower in rank to the *me'mār* who, often assigned the epithet *ustād*, was entrusted with the function of drawing up the *ṭarah* or *naqsha*—the plan—of a proposed building. The *muhandis*, who possessed specialised knowledge of mathematics and geometry, actually specified the proportions and calculations on which the *ṭarah* was based, and then provided close technical supervision to the construction project. While a certain overlap of functions and tasks was inevitable—examples abound from the reigns of different emperors, testifying to varying practices[174]—the main distinction between the *me'mār* and the *muhandis* was that while the former more often than not rose from the ranks of an ordinary, generally non-literate, mason (here patronage played an important role) to the position of an *ustād* specialising in *ṭarah*-making, the latter was from the outset a man of wide learning and enjoyed a distinctly superior social status.[175]

Describing the abundance and diversity of labour as one of the 'good things in Hindustan', Babur wrote of 'unnumbered and endless workmen of every kind. There is a fixed caste (jam'i) for every sort of work and for everything, which has done that work or that thing from father to son till now.'[176] Visual evidence in Mughal paintings sheds light on

the diverse labourers and artisans, men and women, who worked at a site. Regional costumes point to the sources of such labour. Hierarchies of skill, wages and social position are suggested by the scrupulous attention with which Mughal artists detailed differences in physique, dress and the tasks carried out.[177] A stone frieze preserved at the Archaeological Museum, Khajuraho, dating to the tenth century, illustrates the transport of blocks of sandstone by a large number of labouring men and women moving in a procession-like formation from the quarry to the building site. Gradations in wages and specialisation have been recorded by Abul Fazl: a *sadākār*, a simple stone-cutter employed in a stone quarry, ranked lower than a stone-carver, *naqqāsh*, or a *sangtarāsh*, a stone-mason. A sawyer, *'arra-kāsh*, received a lower wage than a carpenter.[178] While it is difficult to arrive at accurate estimates of the number of workers employed over the centuries, it would seem plausible to say there was normally a large labour force at building sites. The ability of a patron to assemble from within his dominions the best of skills and a numerous workforce counted as a sign of imperial success. The chronicler Zia ud-Din Barani's assertion that Sultan Ala ud Din Khalji employed 70,000 workers for his building schemes seems an exaggeration, for it is followed by the claim that the sultan's builders were able to erect a palace in two to three days.[179] Babur, on the other hand, wrote that '1491 stone-cutters worked daily on my buildings in Agra, Biana, Dulpur, Gualiar and Kuil'.[180] Akbar's chronicler, Arif Qandahari, gave the following break-up of workers engaged in the construction of Agra Fort: 2,000 stone-cutters and an equal number of mortar-and-lime mixers (*chunākar* or *gilkar*) worked daily, in addition to 8000 labourers who were employed to supply stone and lime.[181]

Building activity on such a scale, involving large numbers and different categories of workmen, was necessarily accompanied by an administrative apparatus to direct and oversee it. For the Tughluq period, both Ibn Battuta and the chronicler Shams Siraj 'Afif refer to an extensive bureaucracy. While the *diwān-i vizārat* oversaw building projects, direct supervision (often at the site of building itself) came under the purview of the *mir 'imārat* or the *shahna-ul 'imārat*.[182] Under the Mughals, the responsibility of the *mir bahr* for architectural projects extended to include water supply systems, gardening, and the construction of roads and bridges. In paintings, personnel entrusted with specific tasks in building activity can often be identified individually, exercising their particular functions.[183]

In plotting India's architectural history, one cannot but be struck by

the centrality accorded to patrons of buildings. In ancient times merit, spiritual and worldly, accruing from the act of patronage belonged to the patron. The artist or craftsman, as a member of a traditional society, was said to have carried out a social demand, to have discharged a duty for which he earned his living. Whether his name was known or forgotten was considered of little importance. Most medieval chronicles ascribe central agency within the domain of architecture to the person of the ruler. Replete with rhetorical descriptions of the largesse of their patrons and their passion for building, most histories of the Mughal empire, for example, assign the major role in planning cities, ceremonial structures and public buildings to the emperor, telling us relatively little about the actual architectural practices of the time. 'His Majesty plans splendid edifices, and dresses the work of his mind and heart in garments of stone and clay. Thus mighty fortresses have been raised, which protect the timid, frighten the rebellious, and please the obedient . . .'[184] Despite this, it is sometimes possible to see that an individual artist, calligrapher or architect was instrumental in shaping a style or imparting a conceptual cohesion to a building or a complex. For the reign of Akbar, contemporaneous histories are not very helpful in this respect. Akbar's interest in building schemes can hardly be denied; but Monserrate's statement that Akbar 'is so devoted to building that he sometimes quarries stone himself, along with the other workmen', or the miniature from the *Akbarnama*, 'Akbar Inspecting the Construction of Fatehpur Sikri',[185] in which Akbar is portrayed in conversation with a stone-cutter, need to be interpreted within an ideological context wherein the emperor was routinely described as 'the architect of the material and the spiritual world'. One likely possibility was that Muhammad Qasim Khan, who bore the title of *mir-i barr u bahr* (Master of Land and Sea Routes), and who was in charge of the construction of Agra Fort, played a leading role in the planning and construction of Fatehpur Sikri.[186]

There is more information on building under Shah Jahan, but historians have scarcely addressed the question of the role of the individual architect or designer in this context. The only important study is Begley's reconstruction of the career of Amanat Khan, the main calligrapher of the Taj Mahal. The practice of signing finished works was not unknown among Mughal artists: this is how Begley has been able to fix the extent of this particular calligrapher's engagement with the inscriptional programmes of several important buildings—the mausoleum of Akbar at Sikandra, the Madrasa Shahi mosque in Agra, the Serai Amanat Khan near Lahore and, above all, the Taj Mahal.[187] As has been shown,

Amanat Khan was a scholar and courtier, 'Abd al-Haqq of Shiraz, who was awarded the title 'Amanat Khan' ('Trustworthy Nobleman'), by Shah Jahan in 1632 together with the military rank of 900 *zat* and 500 *sawar*.[188] The stylistic evidence of calligraphy has also been used by Begley to distinguish the work of Amanat Khan from that of other calligraphers who, in all likelihood, completed the final phase of inscription on the gateway of the Taj following the death of Amanat Khan in Shah Jahan's sixteenth regnal year. Amanat Khan authored many of the verses he inscribed, as on the gateway to Akbar's tomb at Sikandra. These verses provide the thrust of the entire inscriptional programme of the mausoleum, thereby affirming the decisive role of an individual artist in shaping a monumental complex. The imagery of the Persian verses inscribed on the Sikandra gateway, argues Begley, 'closely parallels the imagery of the Quranic passages inscribed on the Taj Mahal . . .'[189] which was possibly the reason for the same calligrapher being commissioned by Shah Jahan to devise the inscriptional programme of the Taj, in addition to carrying it out. The Quranic verses carefully chosen by Amanat Khan for this mausoleum—the gateway as well as the tomb chamber—built up the central eschatological themes underlying the iconographic ensemble, whose meanings have been analysed in detail by Begley. While Amanat Khan did not live to complete the calligraphy on the gateway, Begley suggests he was central to the architectural conception of the Taj: he would have had to work in close conjunction with the architects, given the close correspondence Begley believes to have existed between the form and layout of the complex, its inscriptional programme, and its overall meaning.

A certain continuity appears to have characterised the attitudes of patrons and craftsmen towards artistic creation over many centuries. The eleventh-century *Samaranganasutradhara*, cited earlier, underlines the magical power of a work of art to transmute matter into form, vision into tangible shape. Architecture, in particular, was said to fulfil more than aesthetic and utilitarian functions: it was 'in the likeness of the architect of the universe, Visvakarma, its working principle, that the architect went to his task . . .'[190] Centuries later, Mughal emperors viewed artistic creation, as 'magical'[191] and artefacts as forming a bridge between 'the realms of the physical or material world (*surat*) and the world of inner meaning (*manavi*)'.[192] This relationship was expressed through an inscription on the west verandah wall of the Sunahra Makan in Fatehpur Sikri: 'Its beautifully drawn paintings are a meaning-displayed form. Its meaning-displaying form is the ravisher of the heart of men

of certainty.'[193] This magical potency of the arts was believed to acquire merit for the patron: it secured him a place in the hereafter, while its virtue acted for the well-being of those who were within the orbit of his power and responsibility.[194] Artists shared this vision and pride in their powers of 'creation'. At the south gate of the Stupa at Sanchi an entire guild of carvers recorded on one of the stone panels that this was their work. Kramrisch cites further instances: Loyana and Kela, two architects of the Vimala Vasahi at Dilwara, carved their portraits on either side of the goddess Saraswati.[195] In Chittor, on Rana Kumbha's Kirti Stambha, and in the Chaumukh temple in Ranakpur, craftsmen carved small self-portraits on the facets of pillars lining the majestic halls which they had built.[196] An unusual representation of the architect at work can be found in a sculpted frieze on the façade of a subsidiary shrine in the Lakshmana temple enclosure at Khajuraho: a *sthāpati* seated in front of a large plan explains its details to a group of disciples who surround him. At Fatehpur Sikri, artisans of particular tribes and castes found a space to inscribe their names for posterity on joints between stones that make up the paving of the masjid courtyard.

Regions

Recent research on political, economic and institutional developments in the provinces of the Mughal empire, instead of attempting to read off the history of regional growth from a process of colonisation by an imperial centre, has focused on the specificities and particular dynamics of each region's evolution and experience of the politico-cultural encounter with new, expansive and at times seemingly opposed traditions.[197] In similar vein, it has been recognised that the study of medieval architecture carried on in terms of imperial styles, that is, with patrons who undertook to 'colonise' regional traditions by appropriating and assimilating them within imperial structures, and by engendering a movement which reshaped regional styles through Islamisation, is premised on an assumption of a monopolistic Great Tradition. The recent proliferation of studies of regional styles and building traditions has furnished a valuable corrective to this historiography of views 'from the parapets of the imperial Red Fort in Delhi . . .'[198] 'Decentring' the historiography of medieval architecture, however, involves more than a simple substitution of an older perspective by a new one. There was frequently a sharp wedge that conflicting attitudes drove between the imperial and the regional, between the aspirations of the élites and the needs of plebeian

communities. By relocating architecture in a nexus of power structures, of particularities and differences, region studies allow a rethinking of the category 'imperial culture'. Composed of disparate elements constantly in flux, this can scarcely be read as a conscious, monolithic entity that simply spread across the geography, polities and societies of the subcontinent assimilating peoples within its fold. Among the regions now studied are Bengal, Vijayanagara, and the Deccan and the Rajput kingdoms of Central India, followed by individual studies of Gujarat and Rajasthan.

Richard Eaton's investigation of the 'rooting of Islam' in Bengal introduces us to the presence of different patterns that shaped the encounter between imperial authority and regional cultures. These patterns reflow time periods and variations in socio-geographical configurations, and show cleavages between a recasting of traditions at a popular level and elite forms of piety that emerged in response to the culture brought by imperial officials. Temples, mosques, shrines, *madrasa*s and victory towers functioned as sites within which such patterns of interaction (and non-interaction) were embedded. The architecture of a region could be read as participating in and giving direction to complex political processes, entailed for instance by the Islamisation of Bengal. The military and political incorporation of Bengal within the Sultanate of Delhi in 1204 was accompanied by architectural enterprises that sought to announce the presence of a new ruling authority.

One path to legitimacy was through emulating models from Delhi: the Qutb Minar, whose genealogical roots went back to Ghazni and Jam, provided an imposing example for a similar tower, the Minar of Chhota Pandua, erected towards the end of the thirteenth century in the south-western part of the Bengal delta where the Turks were engaged in consolidating their rule.[199] The minar's pronounced taper and treatment of surface pattern—which replicates the semi-circular modulations on the third storey of the Qutb—unmistakably 'quote' a hallowed precedent.[200] Another structure, built around the same time, in 1298, the mosque of Zafar Khan Ghazi at Tribeni, has been interpreted as communicating 'the spirit of an alien ruling class' through its restatement of a Sultanate model.[201] A closer study of the mosque's architecture suggests further interpretation. Perween Hasan says the Tribeni mosque was among the earliest to evolve a different plan—a departure from models originating in Delhi—that came to characterise subsequent large and medium-sized mosques in Bengal: that of a rectangular building without an enclosed courtyard. The mosque's façade is marked by a straight cornice and a

row of piers in front instead of a screen of arches.[202] Hasan has also pointed out that the mosque of Zafar Khan was the first in the subcontinent to lay down a pattern which attained widespread popularity in Bengal and, subsequently, in Gujarat, Mandu and Jaunpur, of multiple *mihrābs* in the *qiblā* wall, corresponding to and in axial alignment with the bays of the mosque.[203] Hasan argues that local building traditions, traceable to the brick temples of pre-Muslim Bengal, intervened to transform temple niches built to house figures of deities, into *mihrābs*. These were now imbued with a new symbolic and architectonic function associated with the ideal and practice of community prayer.

The grandiose Adina Masjid at Pandua, completed in 1375, represents a spectacular attempt to break from Delhi and proclaim itself a rival of that tradition by forging links with an older and more hallowed past, that of the Sassanian rulers of Iran. A Persian inscription in the western outer wall refers to it as *al-masjid al-Jāmi*, a mosque where the community assembled in prayer on Friday and where the *khutbā* was read: this was the most ceremonial architectural undertaking commissioned by Sultan Sikander Shah, who proclaimed the independence of Bengal after repulsing Tughluq armies. The mosque asserts the patron's claim to be 'the most perfect of sultans' whose fame was confined not merely to Bengal but spread to 'Arabia and Persia'.[204] The mosque's dimensions surpass those of any Tughluq monument, making it the largest surviving mosque in the Indian subcontinent.[205] When first built, the Adina Masjid comprised a total of 260 columns and 370 bricks domes.[206] It is the only mosque in Bengal to follow the hypostyle plan, which incorporated symbolic associations of the implantation of a community of Muslims in a new area.[207] It is reminiscent of a celebrated Sassanian model, that of the third-century Taq-i Kisra palace of Ctesiphon, considered 'the most imposing architectural expression of Persian imperialism'.[208] This recourse to symbols of authority originating in older civilisations looks for legitimacy outside the radius of Delhi's authority, and for cultural referents that went further west and back in history.[209]

The mosques that proliferated in the independent sultanate of Bengal during the century and a half following the Adina Masjid were more modest structures, usually square with a single large dome, or rectangular with a set of smaller domes, giving up entirely the colonnaded enclosure of the Adina mosque. The material used now for a range of buildings—mosques, tombs, *madrasas*, temples—was almost exclusively brick, with terracotta decoration.[210] Late medieval temples constructed during this period adopted voussoir arches, pointed or cusped, and domed ceilings. In this manner certain local tendencies crystallised. Foremost among these was the use of brick and terracotta, and the curved cornice, or *bangla* roof, adapted from the thatched village hut. In their borrowings, the builders of mosques and temples looked to models of royal architecture, patronised by the earlier Pala or Sena rulers, but drew more freely from local architectural traditions.[211] In addition, as Hasan has sought to establish, Buddhist temples of Burma and pre-Islamic Bengal had a direct bearing on emerging forms of square or rectangular brick structures, contributing to the emergence of a 'distinctly regional style of architecture that had popular appeal'.[212]

Mughal authority in Bengal was fraught with uncertainties of many kinds—continuous warfare against recalcitrant Afghan chiefs and zamindars, a greater sense of alienness stemming from the isolation of the province from the rest of north India. Architecture was intended to proclaim Mughal presence in the province, underlining the claim of an aesthetic symbolising the incorporation of Indian regions within the imperial system. The capital of the province under Akbar was Rajmahal, the site of Mughal victory over the last of the Afghans. Here the Mughal governor, Raja Man Singh, sought to implant the imperial presence through architectural patronage.[213] The most prominent construction during this period was the principal Friday mosque of the capital city—an imposing structure built not in the idiom of earlier mosques of Bengal, but rather in emulation of the Jami' mosque at Fatehpur Sikri. The central ideological message of the imperial centre within the regional periphery accounted for its pre-eminent position within the history of Man Singh's patronage, the fact that the governor was himself not a Muslim notwithstanding.[214] During the reign of Shah Jahan, when Dhaka became the provincial capital, the promulgation of an imperial architectural aesthetic found its fullest expression through the construction of grand palace-garden complexes, *serais*, mosques and mausolea, 'virtual transplants from the North Indian heartland' of Agra, Delhi and Lahore.[215] According to Eaton, such a process had the effect of driving the more 'indigenous' elements of Bengal's earlier political and cultural traditions into the hinterland, as can be observed in the Atiya mosque in Mymensingh district, built in 1609.[216]

And yet the permeation of imperial authority within the regions was not through a simple one-way imposition of aesthetic idioms. It was equally marked by absorption and assimilation within imperial styles of carefully selected regional forms—brackets borrowed from civic, domestic or religious structures in Gujarat, terraced pavilions as found in palace complexes in central India, vaulting systems from Central Asia. These came to stand for individual components of an imperial system,

articulating both its trans-Indian as its pan-Indian claims. In the case of Bengal, the curvilinear cornice, referred to in contemporary writings as *bangla* or *bangala*, suggesting that it could function as a distilled essence of sorts of 'a Bengali tradition', came to be included within the vocabulary of Shahjahani architectural forms, in particular those of ceremonial palace architecture, as can be seen in the Agra Fort or the Red Fort at Delhi.[217]

Studies of regions eventually point to the inadequacy or meaninglessness of labels conventionally used in art historical writings: the insights and perspectives which, for example, the work on Bengal open up, question a 'Muslim architecture in Bengal', viewed as a cohesive stylistic direction which Muslim patrons strove for. Further still, a view from the margins leads to a rethinking of broader categories such as 'Islamic art', understood as a unique and universal civilisational phenomenon. Stephen Dale, writing on medieval Kerala, engages with Oleg Grabar's description of buildings of the Indian subcontinent as having developed 'a system of forms which can properly be identified as Islamic and from which in evolutionary or revolutionary ways all other forms derived'.[218] Dale points out that in regions such as Kerala, which lay beyond the centres of power and patronage of Lahore, Delhi, Agra or Gulbarga, architectural forms did not look for cultural referents in Damascus, Baghdad or Isfahan. Here a host of other factors came into play, such as the social composition of the patrons of the buildings, climate, ecology and accessible artisanal traditions. Dale's observations have been sustained by the findings of Shokoohy's research on the architecture of the Muslim communities settled along the coastal regions of the Indian Ocean from Gujarat to Malabar and Tamil Nadu.[219] Both Shokoohy and Dale underline the fact that the communities in this region were made up largely of merchants, who originally came from villages in south-eastern Arabia or the Persian Gulf. This social group inhabited settlements within predominantly non-Muslim contexts. They possessed neither the political authority nor the economic resources and nor, probably, the cultural aspirations to commission a genre of ceremonial structures that sought to emulate the glories of the Caliphate or the empires of the Ottomans, Safavids and Mughals. The earliest buildings of these regions, in fact, pre-dated those of the first sultans of Delhi. Drawing upon local architects, materials and expertise, Muslim communities in the coastal regions of the subcontinent participated in the formation of an individual style of building described by Dale as a 'commercial monsoon style'.[220] The structural principles followed by nearly all the mosques in Kerala consisted of stone walls, wooden columns, and a sloping roof. Dale points to significant analogies in design and style between these buildings and Malayali temples: a *sayyid*'s tomb located in a village south of Calicut is 'virtually identical in design' to a temple of Siva at Tiruvanchikulam.[221] Even more impressive structures such as the Mithqal Masjid in Calicut, constructed by an extremely wealthy merchant of the fourteenth-century Makhuda Mithqal,[222] reveal evidence of borrowing and adaptation from temples of the region. And yet the new structures were not simple replicas of earlier ones. Dale also points to the 'more subtle differences' between Islamic buildings—mosques, shrines and tombs—and indigenous temples.[223]

The historiography of the kingdom of Vijayanagara had remained, till the early 1980s, trapped in a mould wherein its architecture was perceived in terms of a linear stylistic development in a given time-frame, generating a set of familiar prejudices. The earliest response, expressed in colonial writings, was couched in aesthetic judgements which, on the one hand, lamented the semi-barbaric, local folkish qualities of its artistic creations, and, on the other, admired the exquisite workmanship of a selected number of sculptures, without engaging either with their content or with the art of the city in a holistic sense.[224] Subsequent assessments, found in the writings of scholars such as B.N. Saletore or C. Sivaramamurti, while more approvingly enthusiastic, continued to focus on the study of temple architecture and Hindu iconography in isolation. At the same time, since the Vijayanagara era coincided with what has been termed the Islamic period of Indian history, its architectural traditions, unlike those of the Deccan states (whose growth was perceived as a product of Islamic influence), were generally considered as being beyond the purview of art historical concerns relating to medieval India. Entrenched in the legacy of these perspectives was an enduring axiom of the historiography of Vijayanagara: that medieval kingdom was a 'bulwark' of Hindu resistance against the culture of Muslims or, in a more moderate idiom, as a polity whose historical significance lay in its endeavour to preserve as much as possible of the classical forms of Hindu culture.[225] A much-needed corrective has come from archaeologists, art historians, urbanists, restorers, philologists, and others.[226] In the work of Catherine Asher and George Michell it emerges that courtly architecture drew upon forms inspired by Islam, as they had proliferated in neighbouring kingdoms, rather than resisting them. The multiple sources of Vijayanagara's imperial architecture have been examined in depth by Michell, highlighting the hybrid character of structures and styles. And yet these ought not to be read as signs of uncertainty, eclectic indulgence or idiosyncratic fancy. These monuments constituted

'powerful visual statements' that went into the making of 'imperial ideology and ambitions of the Vijayanagara kings'.[227]

During the fourteenth century the kingdom of Vijayanagara was a cosmopolitan centre, a place where different people, languages and beliefs clustered. Its economy and polity came to be linked through networks of trade and travel to other centres that formed part of the larger geopolitical and cultural space of the Indian Ocean.[228] Turkic mercenaries serving in the king's armies, traders from the Persian Gulf, resident diplomatic emissaries from neighbouring Muslim states, all formed segments of the population of the imperial capital. According to Michell, as there was no single ethnic or religious or linguistic group whose traditions could function as a mimetic sign of imperial culture, courtly architecture came to rest on an 'incorporation of different stylistic traditions'. In other words, movements and transactions that marked both ritual practices and everyday life, and the built spaces within which these were located and enacted, had to be couched in a language of familiarity and intelligibility that would address different segments of the city's population.

The fact that distinct languages of architecture—Indic forms drawn from Tamil traditions and Islamicate, coming from Central Asia via the Deccan—could coexist raises the question whether it would be possible to map the deployment of the two artistic modes according to the differing social contexts or spaces within which they can be found.[229] Wagoner builds up an argument which reads the use of particular forms as socially coded. He argues that while Indic codes of dress continued to enjoy a favoured status in 'interior' or 'domestic' social spaces, the Islamicate code came to be preferred in more 'public' spaces. Yet the evidence of architecture resists such a distinct separation of domains. The functions of buildings were more often than not never restricted to single usage. As Michell points out, the elaborate plans and designs of the structures of courtly architecture suggest that they served more than purely utilitarian functions. In fact, many royal buildings could be closely associated with both public and private activities: it is at times difficult, when trying to ascertain the functions of buildings, to distinguish between 'residence and reception'. Moreover, the 'Indic' and the 'Islamicate' both seem to infuse the articulation of royal authority. The language of Vijayanagara's imperial architecture, it would appear, was marked by codes which overlapped and intersected in ways which still resist unambiguous deciphering.

Scholarship in recent years has redressed imbalances that existed between the study of imperial architecture and that of the regions. The articles by Asher, Shokoohy, Khan, Hasan, Michell and Jain in this collection all testify to this concern. The stylistic evolution of palace architecture in north-western and central India from the fifteenth to the eighteenth centuries has been the subject of an important study by Giles Tillotson.[230] George Michell has contributed to a fresh assessment of the architectural developments of the successor kingdoms of Vijayanagara—the Tuluvas, the Nayakas of Gingee, Thanjavur and Madurai—an area not tackled by any historian of architecture since Fergusson.[231] Yet a large number of regional sites remain unexplored or not investigated in depth. The monuments of the Hoysālas and the Kakātiyas, those of the Yādavas and the Gajapatis, and of the Bundelas in Orchha could be cited in this connection.

V

A survey of the intellectual landscape of the social sciences would remain incomplete without a consideration of the irresistible pull of literary theory and linguistic analysis on the one hand, and the oeuvre of Foucault and subsequent poststructuralists on the other. At the core of Foucault's study of culture is the organising principle of power. Power in his understanding is not reducible to legislation and social structure. It is a strategy, a set of dispositions, tactics and techniques. Power does not originate in either the economy or politics, nor is it exclusively grounded there. Rather, it exists as an infinitely complex web of relationships that permeate every aspect of social life.[232] Such a perspective involves a radically deinstitutionalised understanding of historical processes. Questions of authority, control, the production and subversion of meanings, have all been displaced from the conventional institutional arena into a variety of settings—the workplace, the street, the home, spaces of recreation, study and worship. The Focauldian recognition by historians that the 'truth' about the past is a chimerical entity, and that this past is for most part accessible only through texts intended to organise, describe, prescribe or proscribe its 'realities', has had destabilising implications for the historiographies of art forms. It has made art history almost invariably into a critical reading of 'texts', wherein the encoding of the social and the political in the visual is sought to be explored in sophisticated ways. Through the collapsing of boundaries between the social and cultural, and the dissolution of these formations into an aggregate of discursive practices, the text becomes a category within which

cultural creations—oral, written, painted or built forms—get subsumed. For the historian of architecture, forms, motifs, structural specificities and inscriptional programmes are all collectively understood to make up the language of the text. The rereading of a text through the decoding of images in relation to meanings is no doubt a worthwhile project in that it exposes the myth of universality and autonomy that had been ascribed to aesthetic creation. Yet postmodernism rejects the notion that historians can capture experience in the sense of a lived reality or raw events: this exists rather as a 'linguistic event', one that does not happen outside established meanings. In other words, the social is there only *in* the text.

A position which draws from this devastating criticism suggests that the human response to cultural artefacts will vary according to class, gender, ethnicity, belief systems, and so on. Bourdieu deployed the principle of social differentiation, of class above all, to uncover what he termed the 'special logic' of 'cultural goods', in other words to show that the location of individuals and groups was crucial in determining their responses to works of art.[233] The argument has been extended by Roger Chartier to postulate that, far from being invested with a significance that is universal, stable or fixed, any work of art possesses the potential of transmitting meanings that go beyond the intention of its producers or patrons—meanings that are plural and mobile, 'constructed in the negotiation that takes place between a proposal and a reception'.[234] In a similar manner, the Bakhtinian principle of dialogics seeks to draw out the inextricable relationship that, it argues, exists between the social and the discursive. Dialogic analysis postulates that language is embedded in power structures and social experience, which make it multivocal rather than unitary. Class groups can develop different meanings and inflections for their discourse because of their distinctive social positions and shared experiences. Identities, then, are located neither in subjects nor in language, but come to be constituted through an ongoing interplay between the two.[235]

One of the lifelong concerns of the art historian Louis Marin was precisely the analysis of tensions prevailing between the mechanisms and persuasive powers inbuilt into representations, and the possibilities of refusal or denial they were confronted with.[236] Issues of the material and the cultural, the representation and the lived experience, intent and refusal have become today a hammering board for the practitioners of art history's *posthistoire*. The domain of architecture can function as an important site for the coming together of many of these elements—the material and the social, the functional and the symbolic, the physical and

the ceremonial, the individual and the community. In this sense it may offer the historian a useful vantage point from which to approach and unravel some of the messy entanglements of text and context, of determination and agency.

Writings on medieval Indian architecture which can be associated with recent historiographical trends within cultural history are relatively few, yet they offer a useful sample. Emanating from practitioners of different disciplines these interpretive exercises vary in the rigour, incisiveness and methodological self-consciousness with which they interpret architecture.[237] Both Hillenbrand and Welch come from the discipline of architectural history and confine their analysis in the main to a deconstruction of the language of forms, building practices and epigraphic records. For Hillenbrand the location, aesthetic elements, and mode of construction of the mosque at Ajmer, built in 1199 by Qutb ud-Din Aibak, constitute 'an affirmation in stone and mortar that Islam had come to stay, and it served notice on the local people that the new faith was implacably intolerant of the local religion'. Designating the mosque as 'a metaphor of domination', Hillenbrand interprets the decision to locate the built structure on an elevated platform as 'a deliberate part of a general policy to exalt the mosque and thus the new faith and polity which it represented'.[238] This overlooks the enormous centrality of the functional significance of a public mosque, nor does it relate the issue of its subsequent extension to the need to accommodate an expanding population of Muslims in the area. Rather, each of the different dimensions linked to the phases of its coming into being is plotted and read singly and collectively as a language of signs, a conglomerate of mimetic references that univocally communicated the visible presence of a 'conquering faith'. Such a method, reductive in the extreme, schematises the complex connections between architectural forms and practices and social phenomena by reading elements of the aesthetic as constituting, in unmodified ways, the socio-historical.

Working within a similar mould, William Klingelhofer's article on the Jahangiri Mahal, the only available example of an Akbari palace in the Agra Fort, proceeds on the assumption that the language of architectural form can provide a useful entry point into grasping the meaning of the building, especially in the absence of epigraphic evidence related to it. Klingelhofer's study selectively proceeds to look at devices that make up the formal apparatus of Jahangiri Mahal, constituting it as a text: the 'structural phonetics' of the building, its 'system of spatial relationships', its 'ornamental vocabulary'. His analysis ends up being a structural semiotics that lacks historicity, for it does not move beyond

the sealed frontiers of a system of signs to explore the varied processes by which the building, through its conception, its construction and its functional dimensions, participates to generate what the author designates as 'experience', the ways in which people construed those events as they lived through them. Concretely in this instance, an understanding of 'experience' would be linked to processes embedded in the dynamics of an empire coming into being—the movements of armies and peoples, the mobilisation of individuals, groups and traditions across geographical and cultural spaces. Equally central to the shaping of experience were the uses of the structure for different purposes, as the author peripherally suggests, and the plurality of meanings generated in the process. This is, admittedly, a more difficult proposition to research. Nonetheless it needs to be postulated. An exclusive focus on discursive strategies has a flattening effect, leaving us with a strangely unpeopled world.

More nuanced and methodologically discriminating is the article, 'Defining and Contesting Territory: The Delhi *Masjid-i Jāmī*' in the Thirteenth Century' by Sunil Kumar. Straddling the disciplinary frontiers between political and architectural histories, this investigates the history of Delhi's first public mosque built immediately following the Turkish conquest and the capture of Qilā-i-Rāi Pithaura at the end of the twelfth century. It intends to 'study the history of the *Masjid-i Jāmī*' as a series of discursive statements, which sought to define a moral universe whose protectors and upholders were the Delhi Sultans', and further, to examine 'the dialectic . . . between the definition of a right to authority claimed by the Delhi sultans and its contestation by dissenters . . . worked out within the Delhi's *Masjid-i Jāmī*".[239] In an attempt to historicise the analysis of the Qutb complex, the author plausibly argues that it is only within the temporal context of the mosque—in other words, through a careful examination of the different stages of its construction and extension—that we can grasp the changing meanings of this complex in relationship to the processes by which the embryonic Sultanate of Delhi sought to secure its foundations. He challenges existing historiography, which has tended to view the building of Delhi's *Masjid-i Jāmī*' as one of the stones laying 'the foundation of Muslim rule in India', by arguing, on the basis of contemporary written histories, that in fact the early history of the Delhi Sultanate was marked by intense rivalries among the nobles of Muizzuddin, creating multiple centres of authority, with each one staking its claim to rank as 'a sanctuary for Muslims'.[240] Viewed in this light, Qutb ud-Din Aibak's construction of the masjid in its first phase could be read as 'part of a larger discursive statement', addressed to 'the

Muslim congregation' of Delhi, as also to other competing centres of power, of his 'military and moral accomplishments'.[241] This reading is based almost exclusively on the evidence of literary materials, of epigraphic sources in the form of inscriptions on the mosque's portal eulogising the conquest over idolators, and upon the visual message which the reuse of temple material is believed to have communicated. Kumar further argues that the meanings of the Qutb complex, far from remaining fixed for all time to come, registered their own set of shifts according to the 'authorial intentions' of subsequent rulers who progressively added new structures to the complex. During the third phase of its expansion under Ala ud-Din Khalji, the mosque became the site of competing claims or 'textual strategies' between the sultan and the Sufi Shaikh Nizam ud-Din Awliya, each asserting his respective moral claim to authority.[242] Interpretations of the mosque continued to acquire additional layers of meaning during the nineteenth and twentieth centuries, a discourse articulating the needs of a 'modern representation of India's past'.[243]

Despite its value, a number of questions and dimensions remain unexplored in this essay. To begin with, if we proceed on the assumption that historical materials are more than documents to be considered solely for the information they furnish, but need also to be studied in themselves for their discursive functions, it necessarily follows that texts cannot be confined to a single genre, namely the written, but by their very definition encompass the oral, and the visual in its range of variants—painted, sculpted, built, and so on. It follows further that the principles and hermeneutic logic governing one form of a text do not automatically become applicable to all other forms.[244] It can be reasonably postulated that works of art are endowed with powers inherent in their visuality, which then account for their singularity, and so they cannot be easily conflated with other kinds of 'texts', notably the written word. In the field of architecture, in particular, where the visual intersects with the spatial and the functional, the imposition and workings of the genre possess a distinct specificity. In other words, the historical agency of texts, inscribed within the contexts of their creation, elaboration and dissemination, is determined at one level by the particularities of the very forms given to them—oral or written, in manuscript or print, built or painted. This makes it necessary for historians to take recourse to the disciplines—aesthetics, literature, painting or architecture—within which each of these forms is rooted, to acquire an apprenticeship of the codes and conventions, categories and strategies, particular to each of these

genres. The ease with which historians have tended to dismiss or ignore the specificities of form has often resulted in analyses which are myopic or unidimensional. It is in this light that one question pertaining to Kumar's analysis of the Qutb complex may be posed: can the complex workings of the 'dialectic' between the Delhi sultans' claims to authority and the 'contestation' of these claims be legitimately analysed at a level confined to primarily written materials, without resorting to a rigorous analysis of the visual dimensions of the structures of this architectural complex?

Once we recognise the presence of multiple texts, visual and written, within the structure of a building, an understanding of their 'textual strategies' remains incomplete without taking into account the dynamic between discourse and social practice. One way to disentangle the relationship between discourses and experiences would be by exploring the ways in which subjects mediated or transformed discourses in specific historical settings, implying that subjects have some kind of agency, even if the meanings they construe and reconstrue depend on the discourses available to them at any particular moment. Admittedly, the creators or patrons of a work or an edifice always aspire to fix its meaning and direct its reading, use, and interpretation. It is, however, just as true that the encounter between an image and its viewer, between a building and those who move through its spaces, produces its own set of inventions, shifts, adaptations and resistances. Yet this ought not to imply a lapse into a position of complete subjectivism, one which advocates that there are as many experiences of a text as there are readers or users of it. For accretions of meaning take place in all works produced in a specific sphere, within a specific field of conventions and hierarchies, through the groupings of the social world, through particular cultural assumptions and 'interpretive strategies'.[245] Meanings of texts come to be embedded in structures of the family, neighbourhood, community, are shaped by practices of work, piety, charity, by definitions of pride, honour and respectability. The operations involved in the practices of 'reception' are necessarily shaped by what Lucien Febvre designated the 'outillage mental' of individuals, groups and communities within a given society, which they deploy to make their own worlds less opaque to their understanding. The interpretive conventions of a period or a community are not always easy to recover, especially for medieval times.

Showing that ideas about the past are constructed out of the polysemous panoply of settings and concerns, and not in the spirit of 'pure enquiry', becomes a vital exercise in view of a naively positivist acceptance

of the 'truth' value of materials used in modern historical writings as 'primary sources'. One such exercise, finely tuned and discerning, has been carried out by Richard Davis to examine the historiography of iconoclasm in medieval India from differing perspectives, and the imbrication of memory, narrative and politics through succeeding generations.[246] Davis focuses not so much on the acts of iconoclasm per se, whose historicity at one level can be established, but on analysing the ways in which different narratives—those of the conquerors and the conquered—represented the acts of desecration and reconstruction, rooted as each of them was within particular theological and political concerns and situations. One of the case studies investigated by Davis concerns the Siva Somanatha temple consecrated by the Solanki rulers of Gujarat, which was raided and plundered, its idol and famous Sivalinga desecrated, by Mahmud of Ghazna in 1026. At a time when cults around temple images proliferated in the regions of the Indian subcontinent, the destruction of significant politico-religious sites—as also their subsequent retrieval and reconsecration—became a statement of conquest, moral victory and political autonomy. Icons then 'became crucial indices of political control among the contending warrior élites affiliated with Muslim and Hindu forms of religiosity'.[247] Narratives that developed around these events themselves became a site of contention: in the wake of the multilayered accretions which these narratives acquired over the centuries through a reincorporation and a re-evocation of the memories of iconoclasm, the historiography of a contentious medieval past was drawn into modern agendas—colonialist, nationalist and more recently, Hindu fundamentalist.

The methodological richness of Davis's ground-breaking study lies in the sensitivity and meticulous attention with which he handles questions of language, literary and artistic genres, tropes and rhetorical devices. Equally, he reveals the mediating agency of different communities, of the acts of interpretation and reinterpretation, deployment and resistance through which the relationship of individuals and groups to texts is enacted. Indo-Muslim literary–political writings, starting with Amir Khusrau and Zia ud-Din Barani, created a narrative paradigm in which the acts of the Ghaznavid invader were read as a symbolic representation of the transformation of the Dar al-Harb into the Dar al-Islam—as constituting the teleological founding moment of Muslim imperial control over the Indian subcontinent. The literature of recovery proliferated through the centuries, and was reworked and redeployed by different communities—the Jains for instance, to 'establish the relative powers of different

icons'. The many histories of Somanatha, as Davis recounts them, make up a complex and variegated story, where ways of remembering spell particular modes of appropriating the past according to different ideological imperatives—colonial, nationalist or fundamentalist. The 'lives of images' are shown in this imaginative account to constantly proliferate beyond the religious-cum-artistic intent that underlay their creation: through an ongoing participation the activities of believers, conquerors, rulers, administrators and historians, works of art never cease to acquire fresh meanings beyond those envisioned by their creators or patrons.

VI

In his fiery *Combats pour l'histoire*, Lucien Febvre says the most fascinating part of a historian's endeavour is the challenge of 'making silent things talk, making them say things about men, which of themselves they do not say, or about the societies which produced them—and finally to build up between them that vast network of mutual relationships which makes up for the absence of the written document . . .'[249] Taking up that challenge would mean viewing objects, artefacts and buildings as more than simple physical structures, examining the interrelations between structures and settings, between buildings, peoples and ideas, communities and practices, between the material, the social and the symbolic. Recovering the connections between architecture and everyday life involves looking at the ways in which built spaces enable, mould, inform or constrain activities and their meanings. At the same time, a house, a palace or a place of worship comes into being as a locus within which is inscribed a structure of society and a vision of the world; these enable individuals and communities, through habit and inhabiting, to build up a mastery over the fundamental schemes of a culture.[250] The move towards such a holistic 'anthropology of architecture' would serve to bring back the element of human and social agency into the study of form, language and power.

In the field of medieval Indian studies, the attempt to understand structures as connected to landscapes and cityscapes, as participating in a set of politico-social hierarchies and religious beliefs, has led to interdisciplinary explorations in the directions of geography, urban studies and anthropology. Two such have been reproduced in this anthology.[251] Both can be read as an attempt to move away from a history of architecture as a study of static forms, towards a more dynamic understanding of how architecture, geography, landscape and urban design

[illegible] in a broader socio-historical domain. Petruccioli argues that [illegible] on the subject continue to approach it from the spirit of the last [illegible] limited, in other words, by the framework of colonial attitudes.[252] This has meant that the study of architecture continues to be narrowed down to viewing buildings as isolated structures or objects, frequently focusing its attention on individual 'great monuments', divorced from contexts and relationships to other monuments and places. His study of Fatehpur Sikri, only partially translated into English, looks at the ways in which the experience of nomadic traditions, pilgrimages and military campaigns impinged upon the planning of the city and came to be consolidated into its physical structures and spaces. Fatehpur Sikri was located on one of the 'jugular veins' of the empire, the Agra–Ahmedabad road passing through Ajmer, a distance of two days march from Agra.[253] On the basis of a Mughal document, the *Nakshā-i a'in-i manzil*, describing the disposition of a Mughal camp, together with the detailed descriptions in Abu'l Fazl's *A'in-i Akbari*, Petruccioli draws formal analogies between the spaces and structures of the palace area in Fatehpur Sikri, and the wooden and canvas structures of the *Farrāshi Khānai*, a Mughal tent city. The analogies, he argues, are not of form but of substance, they are confirmed by the fact that the 'techno-constructive nomenclature for tents . . . was transferred *tout court* to that of stationary architecture'.[254] The Mughal court was often on the move; setting up a royal camp was itself a skilled exercise in town-planning. At the same time, the Mughals tended to reproduce the same scheme in their permanent settlement to make a 'veritable stone encampment'. The plan of Fatehpur Sikri would further require an analysis of the symbols of power and modes of 'rationalising the environment with geometry', all of which have made this complex the subject of detailed investigation by Petruccioli and his team.[255]

An equally fruitful attempt is Michell's article comparing ritual movement and urban schemes in two cities of the Deccan, Vijayanagara and Firuzabad, during the fifteenth century.[256] Analysing their urban layouts, Michell suggests a conceptual link between city plans, religious and ceremonial architecture, and patterns of ritual movement (sacral and courtly)—all of which become significant components in the constitution and operations of monarchical ideologies. In both examples, a study of the routes and patterns of movements demonstrates the ways in which these were used to emphasise particular spaces and structures within the city. At Vijayanagara, it was the royal centre with the Ramachandra temple that formed the focal point of different patterns of

movement—radical, linear and circumambulatory. An 'interweaving of human and mythical dimensions into a complex spatial scheme', he says, 'reinforces the connection between royal and divine realms', so that 'kings and gods can meet through the dynamics of rituals and ceremonies. Thus, the capital, in particular its structure of movement, becomes an active "ingredient" in a system in which kings are empowered by gods.'[257] In Firuzabad, similar processes can be traced, despite apparent differences in external forms between the two cities. Movement, in both cases, concludes Michell, 'is concerned with the sanctification of space. Controlling the passage of people within the city is a means of providing the ruler with visible legitimacy.'[258]

Some of the difficulties of reconstructing relationships between buildings and contexts ought to be pointed out. One problem is that a number of the intermediary structures that formed networks of buildings and movements are lost to the historian, while those which survive are often in such a state of disrepair that it is not easy to reconstruct their plans. While the architecture of travel—caravanserais, *ḥammāms*, bridges, milestones, watch-towers—is a better researched area for other regions of the Islamic world, especially Ottoman Turkey,[259] it is still to attract the attention of historians dealing with the Indian subcontinent.[260] Another important dimension related to movement are sites outside the capital cities of Delhi, Agra, Sikri and Lahore, to which the nobility travelled as part of official visits, pilgrimages, campaigns and hunting expeditions. Building activity in these regional sites participated in the dynamics of the specific relationship between region and centre. And finally, while a legitimate case has been made for the study of 'popular building traditions', or 'vernacular architecture', these structures are the most difficult to reconstruct as they were made of more perishable materials, and were less often documented in written sources.[261]

What of the 'architecture of water'—barrage canals and sluice gates, wells and stepwells, *qanāt*s, and fountains through which water came to be aestheticised? The sacral meanings of water drew together many civilisations, resulting in the codification of form and function through myriad architectural expressions and solutions. Water flowed through medieval cities and in enclosed gardens, forming a backbone of urban patterns: a historical study of urban morphology would need to examine not only residential typologies and monuments, but also the location and distribution of water. In Mughal India the need for a rational reorganisation of the irrigation system went hand in hand with a conscious desire to impose a sense of order upon the empire as a whole through a quasi-geometric conceptual reorganisation of its territory.[262] An oft-cited

[illegible] for a study of the hydraulic architecture of early Mughal India [illegible] the *Babur Nama* which, however, ignores the evidence of the substantial [illegible] of the Tughluq and Lodi sultans.[263] In fact, structures such as [illegible] Kund and Anangpur dam testify to the patronage of hydraulic [illegible] by Rajput rulers of the pre-Turkish period. Under Sultan Ghiya[illegible] Tughluq, an elaborate system of dams, which doubled as walls, [illegible] gates, was integral to the overall design and defences of [illegible]abad.[264] Similarly, the impressive dam and sluice gate, Sātpula, [illegible] under the patronage of Muhammad-ibn Tughluq around [illegible] served both as part of his new capital Jahanpanah's system of de[illegible] as well as to bring the surrounding areas under regulated cultivation.

The essay by Jutta Jain-Neubauer[265] deals with an example of hydraulic architecture—stepwells, or *bāoli*s as they are known in Hindustani—elaborated from the eleventh century into an unusual and unsurpassed form of subterranean building. Though examples of stepwells are not confined to Gujarat, this is the region which Jain-Neubauer's detailed study chooses as its focal point, while suggesting connections between a particular architectural genre and aspects of rituals and sociability in an everyday context. The study explains the constructional principles of a stepwell and proceeds to describe some of the important types, described according to their ground plans. An exploration of the iconographic elements of the rich and varied sculptural programme—where mythological figures, domestic scenes, erotica, animals, both real and mythical—make up an important section of this study. Jain-Neubauer also looks at questions of patronage, and her findings suggest that among the patrons were women of royal or aristocratic families who commissioned the construction of a stepwell as an act of charity.

Turning to the Mughal empire, the earliest examples of water constructions were not large-scale civic works, but baths, pools, and exquisite water channels in gardens. Gardens came to be the primary locus of a new geographic experience—interwoven within architectural complexes, they adjusted in form, function and meaning to new surroundings, which they in turn served to transform. The earliest systematic studies of landscape architecture in medieval India date to the beginning of the twentieth century. The concern of their authors then was to recover a typology of the 'Islamic' or 'Mughal' garden, followed by an attempt to identify stylistic influences and classify different garden forms.[266] In her study of Safavid and Mughal gardens, for instance, Elizabeth Moynihan suggested a classification into tomb, palace and pleasure gardens. As Mughal gardens are, in fact, more integrally architectural in conception than their counterparts in other regions of the Islamic world and since many

of them are conceptually part of the plan of imperial tombs, they have by and large been studied and interpreted as Quranic metaphors of Paradise, mirrors of Sufism and allegorical expressions of monarchical power. The focus of scholarly attention has till recently been the 'tomb garden' or the *chahārbāgh*, characterised by a quadripartite division through water channels emanating from a central pool. This has resulted in a relative historiographic neglect of less formalised garden types that proliferated in regions and climates where extensive irrigation was not a primary necessity.

A recent collection of essays attempts to redress this imbalance by directing its focus to specific and diverse urban and territorial contexts within a nonetheless culturally fluid *Dar al-Islam*.[267] In these essays, the garden emerges as being more than an aesthetic space. It would appear to constitute a complex in which the built environment becomes indissociable from the needs and practice of agriculture and horticulture.[268] Petruccioli distinguishes between basic and monumental gardens: while the former, located in areas of irrigated agriculture, has been viewed as a product of the everyday, the latter is conceived of as 'the intellectual fruit of the ruling classes, where aesthetic and representational functions have overshadowed the activity of production.[269] The riverfront garden is one such example: in Agra and Delhi under the Mughals, many gardens opened onto the river. These became a central element in the spatial arrangements of the complex of gardens and built structures lining it.[270] Arguing that the riverfront garden was a development central to Shah Jahan's reign, Ebba Koch underlines the Mughal reworking of a Timurid feature into 'a strictly planned architecturalized composition'.[271] The fusion of nature and architecture into a space where political ceremonial could be enacted would evidently appear, as suggested by Jan Pieper, to be a topos cutting across cultures and state systems, yet one whose expressive forms and symbolic meanings would call for relocation in specific politico-cultural contexts. One such motif is that of the Hanging Garden. Here the relationship between architecture and trees gets reversed, in that it is the built element that holds up the natural, allowing it to unfold as an art form. Exploring its fortunes across time and space, Pieper situates this form of a 'built garden' in the courtly setting of medieval Rajasthan, where its meanings, enriched by both Hindu cosmology as also by Mughal political ceremonial, participated to constitute a self-image particular to the Rajput court. The garden, laid out as a grove of trees on the summit of an artificial mountain, furnished a 'choreographic' setting.

Domestic architecture within the context of broader issues of gender relations within medieval societies and polities remains underresearched. Recent work on state-formation under the Mughals has underlined the importance of gender identity in the efforts of Mughal emperors to create and consolidate an élite imperial service.[272] O'Hanlon posits that the household and the kingdom in the Mughal empire made up 'homologous worlds' within which models of virtue, authority and obedience were reconstituted and enacted, the image of one reinforcing the legitimacy of the other. Within *akhlaqi* literature, which the author draws upon, the household came to be conceptualised as a mediating space between the emperor and his nobles, and therefore great significance was attached to its proper governance, regulation and material organisation.[273] At another level, gender relations were an integral element within processes of conquest and imperial consolidation. Ties of allegiance and loyalty were customarily sealed by marriage alliances. These brought a baggage of traditions, cultural practices and iconic forms. Invested with strategic, cultural and moral significance,[274] the institution of marriage forged a series of connections between communities, regions and the empire, at the heart of which lay the household. That these factors generated a set of architectural and spatial imperatives can scarcely be doubted.

The built environment embodies a hierarchy of private, semi-private, public and semi-public spaces within which gender norms and practices have special importance. Yet in the present state of knowledge and remnants of buildings, lines of enquiry can only be broadly suggested and questions raised in the hope of orienting future research.[275] In royal complexes such as Fatehpur Sikri, clusters of buildings such as the so-named Birbal's House, Maryam's House or the Sunehra Makan and the larger Jodh Bai's Palace could all, in view of their location, plans and spatial organisation be designated domestic. So could the Jahangiri Mahal in the Agra Fort, given the similarities of organisational principles that govern its layout. Tightly regulated access points and distinct types of spatial ordering within interiors are some of the characteristics of an architecture that follows gender norms, and which in turn structures forms of behaviour and communication. The household being a site of economic and ritual activity, of the constitution and enactment of authority and hierarchies, of sexuality and procreation, its architecture becomes part of a socio-cultural matrix within which both men and women operate. What would be fruitful to follow up are gender differences and the partitioning of spaces: can *mardāna* and *zanāna* sections within domestic buildings be identified through particular forms of architectural treatment?

What were the functions, architectural and social, of intermediate or transitional spaces, semi-private in nature, separating the more private zones from each other or the outside? How did spatial organisation intervene to shape the nature of communication, private and collective? To what extent did the choice of certain iconic traditions in households make them 'participants' in the construction of what O'Hanlon designates 'north Indian or Hindustani patriotism', defined in gendered terms and deployed to form the cultural ethos of a new ruling class?[276]

VII

> Since time immemorial, conquerors and revolutionaries, eager to destroy a society, sought to do so by razing to the ground or setting fire to its monuments. At times they contrived to redeploy them for their own use. Here too, usage goes further and deeper than the codes of exchange.[277]—Henri Lefebvre, *La production de l'espace*, Paris 1974: 254.

The struggles which have erupted over issues of history and identity, over the demarcation of sacred spaces and the very right to survival of communities, have made apparent the centrality of symbolic resources within the processes through which identities and memories have been constructed and reconstructed. Being highly selective as well as inscriptive, such processes serve to sustain ideological positions and redefine boundaries between social groups and communities. The relationship between heritage, histories and nation-states as indissociable has been acknowledged by modern historiography. The past, distilled as icons, produces between communities, groups and nation-states a form of bonding with their precursors and progenitors, with their earlier selves and their successors. Buildings of the past are among the most tangible icons. The narrative centre of a large number of recent vernacular nationalist histories, it has been pointed out, is not a particular region or people, not even a physical site, but 'a building on that spot'.[278] Acts of destruction and reconstruction structure these narratives in decisive ways. The instrumentalisation of a pre-modern past to serve present ideological ends, to legitimise acts of desecration and political violence, has a direct bearing on the writing of architectural histories of medieval India. Among the issues that have acquired a contentious edge are questions of the appropriation and destruction of objects, images or buildings by medieval rulers, often in the context of conquest. Such actions, frequently designated 'loot' or 'iconoclasm', have been interpreted as a form of theft or as part of a larger project to annihilate a community

through the desecration of its sacred spaces and symbolic objects. It is here that the crux of the historian's confrontation with a modern notion of architectural heritage lies, a notion buttressed by chauvinist anxieties and resting on faith rather than empirical analysis.

Richard Davis addresses many of these tangled issues by proceeding to historicise the practice of 'looting' or 'the forcible expropriation of sacred objects', primarily though not exclusively of religious significance, that was widespread and well understood among rulers across the subcontinent. He argues that wartime looting of objects and their relocation in new contexts was part of a signifying political rhetoric by which rulers made public their claims of victory, overlordship and legitimacy. The cases Davis investigates relate to Hindu kings of medieval India whose wartime practices of appropriation were circumscribed within normative codes, such as the *Manusmṛti*, wherein kingship involved the moral responsibility of imparting unity to a domain of which the monarch constituted the sacred centre. Objects seized during military campaigns were then reapportioned within this domain as part of an act of symbolic incorporation of the signs of formerly dispersed territories and powers. Davis does not stop at this analysis of the political meanings of such acts of seizure and reappropriation. He proceeds to look at the range of transactions that a redistribution of these objects could possibly effect: an image could be given as 'a token of submission, a metonymic acceptance of ritual subordination, in order to forestall an actual invasion and a more forcible incorporation'.

The issue of Islamic iconoclasm in medieval India has been an equally central preoccupation of histories. One explanation for this lies in the normative directives within orthodox Islam which call for the destruction of objects embodying idolatry and polytheism. Warrior elites staked their claims to legitimacy and piety by publicly proclaiming their acts of desecration of the sites and symbols of idolatry in written texts and inscriptions that then found a central place within appropriated sites and structures. Questions of this genre have been problematised by Davis elsewhere.[279] His analysis of the subject of Muslim iconoclasm—with particular reference to the instance of the Siva temple of Somanatha—concentrates on issues of historiography: it highlights the terms in which a range of accounts across time, region and ideologies—medieval Indo-Muslim, Rajput, Jain, colonial, nationalist and fundamentalist—narrated the acts of destruction and reconstruction of the temple at Somanatha, underlining the contending claims of different groups who described an 'event' to suit their particular agendas.

In the following pages, I shall try to shift the focus from written

narratives of acts of iconoclasm and destruction to the evidence of the architecture itself. In doing so, I wish to argue for a need to restore to the processes of expropriation, destruction and reappropriation of buildings their variegated histories, inscribed in specific contexts of warfare, consolidation, everyday life and the multiple and changing uses of buildings. A move beyond written discourses and the contending claims of warrior élites alone to look at the evidence of architecture ought to enable us to rethink categories and polar oppositions, such as that between 'sacred' and 'profane' architecture, often taken as fixed and unchanging.[280] An attempt to reconstruct, wherever feasible, the myriad ways in which buildings were reappropriated and intervened in the everyday lives of men and women, of different groups and communities may help in historicising the polarities between 'iconoclasm' and 'assimilation', and so sensitise us to the dangers of burdening pre-modern pasts with contemporary concerns and meanings.

The following paragraphs are an attempt to develop the methodological reflections outlined above through the example of one of the earliest structures built in medieval Delhi in the wake of the Turkish conquest of the city: the *masjid-i jāma* or public mosque where Friday prayers took place.[281] The coming into being of Delhi's *masjid-i jāma* can be seen as part of a pattern of conquest and 'symbolic appropriation' of an alien territory, processes which had precedents in the history of Islam's expansion in Arabia, North Africa and Southern Europe.[282] The expression of victory over a conquered land was effected through immediate visual acts and forms, often involving the seizure of the centres of power and most sacred sites of the indigenous populace: the ruler's palace was taken over, the main temples destroyed. As soon as possible, a *masjid-i jāma*, the chief congregational mosque of the capital, was built, where the *khutbā* was read, proclaiming the new ruler. New coins were struck. Appropriation went beyond a simple annexation of territory or a geographical site; it included building materials, an existing labour force and a body of tradition and art forms belonging to the vanquished, which then got reabsorbed into the new structures in ways that were crucial to the (re)constitution of their meanings.

In other regions of the Islamic world, especially those possessing a tradition of community prayer, the destruction of extant buildings in order to construct a mosque was generally avoided, for basilica, churches or synagogues all had large hall-like central spaces designed to accommodate large numbers of believers.[283] In the process of converting these

buildings with minimal adjustments into mosques, the new architecture absorbed many visual and structural elements—rows of columns, courtyards, arches and domes—from the buildings it appropriated. In the Indian context, antithetic forms of worship in Hinduism and Islam—the one personal, introspective and anthropomorphic, the other non-figural, inspired by an ideal of community, brotherhood and surrender to an abstract truth—accounted for the distinct forms of religious structures whose spaces could not be easily harmonised. Hence the necessity of dismantling temples and redeploying their materials for the creation of an architectural space designed to accommodate a congregation of worshippers. That the pulling down of the temples, hyperbolically claimed to be twenty-seven in number, was at the same time part of the eulogisation of conquest has been pointed out by every scholar, drawing upon the proclamation of victory over the infidels made by the epigraph on the main portal.[284] The question however needs to be asked, whether the meanings that we believe to have been transmitted by Delhi's first *masjid-i jāma* can be reduced to a statement of one kind—expressed through the medium of an extremely difficult and complex Naskhi script understood by a handful of literate members of the orthodox *'ulamā* and nobility—or whether the iconic evidence furnished by its architecture followed its own logic. More significantly, whether the diverse possibilities of appropriation and use of this architecture by different social components within the emergent township of medieval 'Dilli' allowed for a synchronic proliferation of multiple meanings within the spaces and forms of a single structure.

Interpreting the architectural evidence of the *masjid-i jāma* involves a reconstruction of the processes by which its structure and forms came into being, of the milieus and genres, conventions and building practices of the time. The *qiblā liwān* or main prayer hall of the mosque oriented towards Mecca follows the Arab prototype made up of a hypostyle hall—that is, a hall where the roof is carried by columns and pillars set in parallel alignment with the walls. The origins of this form go back to the visual memory of Islam's first mosque, the house of the Prophet at Medina, which had an inner courtyard with two shaded areas. The latter were made up of a thatched roof held up by rows of palm trunks. And so a visual form was created that soon became a sacred memory, which crystallised in the minds of the faithful through the subsequent emergence of the hypostyle form and common to a large number of public mosques in Egypt, Tunisia, Syria and Spain.[285] In addition, the courtyard of the

Prophet's house was the place where almost all significant activities and decisions of the embryonic community took place, and so was transmitted through to the collective memory of subsequent generations as more than a simple place for prayer.[286] That the earliest monumental mosque in Delhi relocated this memory within an Indian setting was a significant symbolic act associated with the inception of the Delhi Sultanate. Later, Sultan Muhammad-ibn Tughluq placed the *masjid-i jāma* of his new capital, Jahanpanah, also known as the Begumpuri Masjid, within the same tradition, hoping to assimilate its legitimacy to his ambitions.

The advantage of the hypostyle model was that its space-creating elements, the rows of roof-supporting columns, could be added length-wise and/or sideways to extend an existing building, without fundamentally disrupting its original conception, as in fact was done in the case of the *masjid-i jāma* begun by Qutb ud-Din Aibak and later extended by Iltutmish and Ala ud-Din Khalji. The use of the hypostyle model moreover enabled subsequent sultans to draw upon the aura of the previous site, consecrated through its use as the site of a hallowed structure symbolising the presence of a new political and cultural force, and at the same time to make fresh additions marking their own claims to authority and glory.[287] In fact, the additions to the Qutb mosque made by Iltutmish transmit a message within which elements of continuity and discontinuity appear to coexist with little sense of strain. Under Ala ud-Din Khalji, the continuity sought to be established by the sultan stretches further back into history. Ala ud-Din doubled the size of Iltutmish's courtyard, ordered the extended *maqsura* walls to be thicker and higher, and planned the construction of a second, even higher minar towards the northern end of the courtyard.[288] Moreover, he added a southern gateway to the complex, the exquisite Alai Darwaza. The complex epigraphic programme of the Alai Darwaza seeks to inscribe Ala ud-Din's fame within the genealogy of earlier empire builders, including Alexander.[289] A central architectural component of the Alai Darwaza is its pointed horseshoe arch with its spearhead fringe, a feature introduced for the first time in an edifice on the Indian subcontinent. Its associations were unmistakable: visually it belonged to the memory of the Great Mosque of Cordoba, symbol of the power of the caliphate at its highest. The horseshoe arch was subsequently emulated in other regions and structures of North Africa, subsequent to the decline of Muslim power in Spain and a large-scale emigration of artisans following the Reconquista.[290] This single image could then effectively function as a link making up a chain of references that held together sites over a vast geographical area within the symbolic framework of a world empire.

[illegible] construct the Qutb mosque, the original temple was stripped of [illegible], while the *vimāna* was enlarged to form the central courtyard. The local *sthāpati* was ordered to oversee the dismantling of the [illegible] stones, held together through methods of dovetailing rather than [illegible] and therefore relatively easy to take apart without destruction [illegible], and their careful reassembling to form the pillars of the [illegible] *riwāq*. The visual and iconic evidence of the pillars does not, [illegible] testify to any systematic iconoclasm. A similar practice seems [illegible] been followed in the construction of the ceilings, where individual [illegible] have all been put back together with great care taken to recreate [illegible] central motif of the lotus roof.[291] The result is unexpected and unusual as sacred space of Islam live with the rich visual vocabulary of Hindu and Jain art forms. Rows and rows of pillars receding into the [illegible] depths of the *riwāq* resonate with the plasticity of the sculpted [illegible] that cover their surfaces—*kalaśa* and the lotus, *yakshas* and *hamsas*, carved ceilings with figures connected with Jain Tirthankaras [illegible] the upper level of the *riwāq*. While a number of explicitly anthropomorphic motifs have been avoided by reversing the sculpted face of the [illegible] towards an inner wall, others have remained visible and intact: representations of the ten incarnations of Vishnu can be seen facing the [illegible] on the southern wall. Most striking, however, is a panel in the [illegible] on the north side, portraying scenes from the birth of the infant Krishna.[292] The visual experience of this space, with its trabeate principles of construction and awkwardly shallow domed interiors, was far removed from the memory and associations of a prayer space created in accordance with arcuate principles of construction and a traditionally 'Islamic' aesthetic. It was in response to a need to recall and relocate some of those associations generated by a visual vocabulary familiar to Islam that the construction of the *maqsura*, or a free-standing screen of arches framing the *qiblā liwān*—lending emphasis to its direction and towering above the courtyard and its structure—was ordered. The entire screen façade, built through corbelling and smoothening the overlapping stones to form the outline of a pointed arch,[293] is carved in bands of low-relief patterns—calligraphic inscriptions intertwined with floral motifs, clinging creepers and a stylised lotus design. Calligraphically rendered Arabic script is an art form found throughout the Islamic world, from Spain to India, from the earliest to the most recent times.[294] Religious inscriptions, primarily Quranic verses, make visible the word of God. They were also believed to act as a sort of talisman for the building or object on which they are inscribed. Inscriptions were mainly used as a frame along and around the main elements of buildings, especially portals and cornices.

Referred to in Arabic as 'geometry of the line', calligraphy provided at the same time a legible message as a decorative motif. The scripts vary from the flowing, cursive Nasta'liq, as in the *maqsura* of the first phase of the Qutb mosque, to the angular Kufic, an earlier form which accentuates vertical strokes, bands of which cover the inner walls of Iltutmish's tomb located at the northwest corner of the same complex. The inscriptions on the *qiblā* screen carry a selection of Quranic messages, distinct from those on the portal. Rather than making a statement about the punishments awaiting the infidel, they stress the importance of adherence to the tenets of the faith, piety in everyday life, of moral conduct and brotherhood among Muslims.[295]

It becomes clear, then, that the architectural and iconic evidence of Delhi's first *masjid-i jāma* carries a host of meanings, all of which cannot be reduced to a militant assertion of victory over a land of unbelievers. That the structure was addressed to the Muslim population of Delhi with a view to constituting its diverse components as a 'community' by reminding them of the political and moral virtues of their ruler—as opposed to other claimants to authority—was certainly one element of its programme. What needs to be investigated further is the polysemous character of this evidence—iconic, spatial, functional and textual—which can be arrived at by looking at the possible forms of its circulation and assimilation, by trying to investigate the terrain where discursivity met with social practice and cultural experience, the determinations that would have come into play through the heterogeneous publics which made use of the spaces and structures of this significant complex. For the large majority of these publics, it must be emphasised, culture was accessible through media that were mainly oral or visual. We need, therefore, to look at the functions of the mosque in the everyday lives of the urban populace who moved in and out of its spaces, the semiotics of its architecture, and the potential this had to become a resource of one kind or the other for a range of individuals and groups.

The centrality of a congregational mosque, the *masjid-i jāma*, in the social life of the populace of a city has been well established by research.[296] It was more than a place for prayer. It formed the locus of community life: it housed a *madrasa*, a treasury—additions made by Ala ud-Din Khalji to the *masjid-i jāma* of the old *shahr*—and was a place for meeting and transacting business. Sultans often decreed that the city's grain market and bazaars be located outside its portals, as Ala ud-Din did in Delhi. Equally important were its political functions, as

[illegible] where the *khutbā* was read and legitimacy accorded to the ruler. It was the site where protests were voiced, disputes adjudicated, [illegible] hatched. Islamic tradition does not lay down any specific [illegible] directives for the construction of a mosque; rather, its architecture [illegible] evolved historically through different phases of the expansion of [illegible] empires in response to a variety of factors—climate, technology, [illegible] traditions, and above all the need to fulfil a range of communi[illegible] functions. At one level, the mosque is part of a larger whole, re[illegible]ented by Islam with its sacred centre at Mecca. Unlike a Christian [illegible] where every significant action converges at the altar, there is [illegible] liturgical centre in the mosque, for the sacred centre is not within the [illegible] but outside it. This determines the orientation of every mosque [illegible] the Islamic world, and of every devout Muslim at the time of prayer, [illegible] becomes in this manner a physical reminder of belonging to a larger [illegible] community transcending political frontiers. At another level, the congre[illegible]ational mosque was conceived of as a closed unit at the time of prayer, [illegible] refuge from the outside world within which class antagonisms, dissid[illegible]ce, rivalries and differences dissolve through the constitution of a [illegible]omogeneous community held together by piety and brotherhood. The [illegible]orizontal axis of a mosque, and the lateral organisation of space within [illegible] interior, sought to generate the experience of solidarity.

A variety of relationships could get cemented within and through this [illegible]ucture and its epigraphic programme. To begin with, an egalitarian [illegible]rotherhood was defined through conformity to Islam and so, by its very [illegible]efinition, through an exclusion of those outside that structure. In the [illegible]ontext of north India at the beginning of the thirteenth century, the Mus[illegible]im community was heterogeneous. Apart from a minority of Turks ac[illegible]ompanying the Muizzi commanders, including their slaves, the ranks [illegible]f the Muslims were expanded by immigration from Afghanistan, Sind [illegible]nd Khurasan. These groups were characterised by deep-rooted ethnic, [illegible]o-economic and cultural differences.[297] And finally, a substantial [illegible]ection of Indian Muslims were Hindu converts to Islam.[298] While cer[illegible]ain kinds of Quranic prescriptions formed one kind of programme [illegible]hrough which all these groups could be collectively addressed as Mus[illegible]ims, the eclectic visual vocabulary of the mosque's decor was likely [illegible]o be interpreted variously by the individual cultural and ethnic compo[illegible]nents of a community coming into being, each of whom resorted to their [illegible]wn mechanisms to create a definition of the self in relationship to a [illegible]arger whole. For Hindu converts to Islam, for example, the access to

a new sacred space and the forging of new bonds could be mediated through a language of familiar forms that could then function as a meaningful resource in the constitution of identity. Research has in fact established that conversion to Islam did not necessarily result in the discarding of older cultural practices, including distinctions of caste.[299] For lower caste Hindus who had been denied access to the sacred sites of worship, the adoption of Islam meant the entry into a sacred space alive with images and symbols of a divinity, union with whom possibly represented the highest level of yearning.

Another question that needs to be addressed is whether—and the extent to which—the architecture of the Qutb mosque and complex intervened in the lives and perceptions of non-Muslims: in other words, to examine the functions of the mosque outside the Friday prayers, and the ways in which these were embedded within the socio-cultural fabric of thirteenth-century Delhi. The mosque and the bazaar, the two poles of urban life, were often located in close proximity. Ibn Battuta's descriptions of Delhi in the fourteenth century suggest that the first urban settlement of medieval Dilli, the old *shahr* with the Qutb complex and the neighbouring *dargah* of Qutb ud-Din Bakhtiyār al-Kā'ki, continued to retain its social and cultural pre-eminence, even after subsequent sultans had created their own capital cities, such as Siri and Jahanpanah.[300] The bazaar, with the grain market situated outside the portals of the mosque and the cloth market on the inside of the Badayun Gate, was then one important spine of the urban fabric, linking the *masjid-i jāma* with the *madrasa*s, the *hauḍ*, the quarters of the Multani cloth merchants and the *dargāh*.[301] The extreme fluidity between the domains of the religious and the worldly has been repeatedly testified to by studies of various cities within the Islamic world.[302] While knowledge about the architecture of the markets is elusive, research suggests that formal and functional parallels did exist with religious architecture. For example, the form of the Ottoman *bedsten* replicated the plan of Anatolian congregational mosques of Seljuq times.[303] The inextricable links between the sacred and the secular are also confirmed by the fact that revenue from commercial enterprises provided the financial underpinnings for many religious institutions, including their edifices, such as mosques, *madrasa*s and tombs.[304].

Following conquest and appropriation, long-term exigencies had to be seen to: the authority of the new rulers had to be upheld. This required recognition and acquiescence by different social groups, the conquerors,

the migrants, the indigenous populace. Ensuring the survival of new ruling groups meant that the economic needs of both old and new had to be met. The spread of new norms could not but go hand in hand with a peaceful acceptance of some of the older ones. Urban culture was formed out of bonds between individuals, between the *qaḍi* and the sufi, the *amir* and the merchant, between local particularism and the movement of peoples and ideas over continental distances. Practices governing the relationship between Muslim and non-Muslim communities in the Sultanate of Delhi often drew upon precedents from other regions of the Islamic world where Arab conquerors came into contact with communities of Jews and Christians. Orthodoxy on both sides clung to the principle of exclusivity as a mechanism for establishing and maintaining difference, and sought to place restrictions on forms of contact between Hindus and Muslims. Among orthodox Hindus it was the practice of untouchability that served this purpose: according to Ibn Battuta, Muslims were respected but the 'natives do not dine with them or admit them into their houses'.[305] Muslim orthodoxy, whose spokesmen were the *qaḍi*s and the *'ulamā*, prescribed that it was undesirable for Muslims held in esteem in their communities to be close to 'men of falsehood and evil' unless absolutely necessary. In everyday practice, however, the prescriptions of the *shari'āh* could never become fully operative. Apart from Muslim merchants engaged in lucrative long-distance trade, the majority of merchants, moneylenders and shopkeepers were Hindus, and to none of these communities were laws restricting commercial transactions ever applied. Relationships of mutual dependence thrived between the latter groups and members of the *'umāra*, who, next to the sultan, enjoyed the highest social status. Contacts, encounters, the creation of new bonds and relationships were central to the processes by which empires came into being and state structures consolidated. Being a merchant, for example, required a knowledge of manners and an understanding of human beings and situations, for success hinged on the art of communication and cultivating contacts with potential patrons and customers.[306]

That the edifices and spaces—in this particular case the *masjid-i jama*—within which these encounters took place were mediating spaces, spaces which were part of the relationships coming into being, is a subject which historians of architecture have not really looked at. This is a slippery area, and the difficulties involved in the recovery of experience in the realm of the visual and the spatial ought not to be underestimated. Yet the question needs to be posed. In this particular instance,

it may be postulated that 'symbolic appropriation' of a conquered land needed to be followed by attempts to relate meaningfully to the conquered world—the reabsorption of many of the religious and cosmological traditions and their visual forms which belonged to the vanquished. The reabsorption and relocation of motifs and symbols, it must be further pointed out, was not entirely arbitrary or idiosyncratic. Rather, certain principles of selectivity were applied. In the Qutb complex, two recurrent symbols, often fused into a single motif, are the lotus and the *kalaśa*. These occupy a central position with Hindu and Jain iconography. Both are replete with meanings related to life, fertility and creation: the *kalaśa*, an ancient Hindu and possibly Buddhist symbol,[307] used on pillars, was an auspicious receptacle for water. The lotus could aesthetically function as a symbol of creativity at all levels. Symbols such as this could effectively participate in the forging of links between different cosmological traditions. Water was, after all, a central component of Islamic architecture.



'The meaning of an utterance is not constituted in *your* voice, nor in the act of *my* hearing, but in the space which joins your voice with my hearing of it—a space, moreover, which is in some ways a space of silence but which is also already inhabited, already over-determined by other voices, other hearings, other silences.'[308] Aijaz Ahmad's expressive resume of the Bakhtinian principle of dialogics underlines the essentially social character of the triangular relationship between works of art, their producers and their viewers/users. Applied to the study of architecture, this principle implies going beyond a descriptive examination of visual form and structure to look at the ways these were used and understood, at the movements, ceremonies, routines and practices which give architecture its living, social quality. At the same time, my plea has been for a history grounded in the study of form—not form per se, understood as a fetishised abstraction or a set of essentially ahistoric semiotic codes—but of forms as an active component of those symbolic forces that define the social world. Historians of medieval India, engaged today in efforts to rethink the histories of power, of social relations, of religious beliefs and cultural practices, can no longer afford to bypass the history of its architecture. This history is an irreplaceable entry point into understanding ideals and ideologies, the setting in which power relations were secured or contested, and the multiple ways and media through which communities and relationships were forged.

Notes and References

1. In dem *Gotteshaus*, das die in Existenz stehende Gemeinschaft voraussetzt, vollbringt die Gemeinde das Werk der Verknüpfung . . . Die Gemeinde, die sich im Gotteshaus zu Gebet und Verehrung findet, entwächst der Unvollkommenheit des gemeinsamen Lebens, nicht um sie zu überwinden, sondern um ihrer eingedenk zu bleiben und sie immer wieder in die Spannung einzubeziehen . . . Durch die Erbauung der Gemeinde baut sich so die Gemeinschaft stets von neuem auf, und die Erhebung über den Alltag bewahrt den Alltag selber vorm Versinken.' All translations, unless otherwise cited, are mine.
2. Ibn Khaldun, *The Muqaddimah*, vol. 2: 355.
3. Franz Kakfa, 'Beim Bau der chinesischen Mauer', in *Sämtliche Erzählungen*, (ed. Paul Raabe), Frankfurt/Main 1978: 289–99.
4. Siegfried Kracauer, 'Die Hotelhalle', in *Das Ornament der Masse*: 157–70.
5. Literature in the burgeoning field of cultural studies is voluminous in the extreme. Good overviews of themes and debates, with extensive bibliographies, can be found in Nicholas B. Dirks, Geoff Eley and Sherry Ortner (eds), *Culture/Power/History: A Reader in Contemporary Social Theory*, Princeton 1994; Jessica Munns (ed.), *A Cultural Studies Reader: History, Theory, Practice*, London 1995; Nicholas B. Dirks (ed.), *Colonialism and Culture*, Michigan 1992; Terence J. McDonald (ed.), *The Historic Turn in the Human Sciences*, Michigan 1996. Within Indian history the following examples flesh out connections between the social and the cultural: Romila Thapar, *Cultural Transaction and Early India: Tradition and Patronage*, New Delhi 1987; Richard B. Eaton, *The Rise of Islam and the Bengal Frontier 1204–1760*, New Delhi 1994; Shahid Amin, *Event, Metaphor, Memory: Chauri Chaura 1922–1992*, New Delhi 1995; Sumit Sarkar, *Writing Social History*, New Delhi 1997.
6. Dirks *et al.* (eds), *Culture/Power/History*: 4–5; Roger Chartier, *Cultural History: Between Practices and Representations*, Cambridge and Ithaca, 1988.
7. As pointed out in Sanjay Subrahmanyam, 'The Mughal State—Structure or Process? Reflections on Recent Western Historiography', *Indian Economic and Social History Review*, vol. 29, no. 3, 1992: 292–3. This criticism is equally applicable to those most aware of it: see especially Muzaffar Alam and Sanjay Subrahmanyam (eds), *The Mughal State 1526–1750*, New Delhi 1998. In their long polemical Introduction they look at these processes in overwhelmingly economic and often narrowly political terms; little recognition is accorded to the ways in which cultural factors are also central to state-formation. Of the articles in the volume, the only ones which tangentially relate to questions of culture are by Norman Ziegler, and by John F. Richards and V. Narayana Rao. A more sensitive approach to the cultural dimensions of Mughal state-building emerges in Muzaffar Alam, 'The Pursuit of Persian: Language in Mughal Politics', *Modern Asian Studies*, vol. 32, no. 2, 1998: 317–49.
8. See the prolific writings of Irfan Habib, Iqtidar Alam Khan, M. Athar Ali and

Shireen Moosvi. For a more critical position on the 'Aligarh School', Alam and Subrahmanyam (eds), *The Mughal State*: Introduction. On the historiographical implications of 'communalist perspectives', Romila Thapar, Harbans Mukhia and Bipan Chandra, *Communalism and the Writing of Indian History*, New Delhi 1977; Romila Thapar, 'Imagined Religious Communities? Ancient History and the Modern Search for a Hindu Identity', *Modern Asian Studies*, vol. 23, no. 2, 1989: 209–31; Sarvepalli Gopal (ed.), *Anatomy of a Confrontation: The Babri Masjid--Ram Janmabhumi Issue*, New Delhi 1990; Tapan Basu, Pradip Datta *et al.*, *Khaki Shorts and Saffron Flags: A Critique of the Hindu Right*, New Delhi 1993; Gyanendra Pandey, 'The Culture of History', in Nicholas Dirks (ed.), *In Near Ruins: Cultural Theory at the End of the Century*, Minneapolis 1998: 19–37; K.M. Shrimali, 'A Future for the Past?', paper at the symposium 'The Present and the Cultural Heritage of India', Indian History Congress, 59th session, Patiala 1998.

9. Some exceptions are Shireen Moosvi, 'Expenditure on Buildings under Shah Jahan—A Chapter of Imperial Financial History', *Proceedings of the Indian History Congress, Forty-sixth Session, Guru Nanak Dev University, Amritsar 1985*, Amritsar 1986: 285–99; Ahsan Jan Qaisar, *Building Construction in Mughal India: The Evidence from Painting*, New Delhi 1988. Both these do deal with aspects of architectural history generally neglected by historians of art. More recently, Iqtidar Alam Khan has begun work on subjects relating to architecture in medieval India: see his article in the present volume.
10. See especially John F. Richards, *The Mughal Empire*, Cambridge 1993; Douglas E. Streusand, *The Formation of the Mughal Empire*, New Delhi 1989; Peter Jackson, *The Delhi Sultanate*, Cambridge 1999. An attempt towards an integrative approach can be found in Stephen P. Blake, *Shahjahanabad: The Sovereign City in Mughal India 1639–1739*, Cambridge 1991, though his analysis seems to rest on the assumption of a certain model of a 'patrimonial-bureaucratic' state, in the light of which he proceeds somewhat mechanistically to interpret the evidence of urban forms and architecture. On the other hand, writings that furnish significant exceptions to the broader trends critiqued above include Eaton, *The Rise of Islam*; David Shulman (ed.), *Syllables of Sky*, New Delhi 1995; Daud Ali, 'Violence, Gastronomy, and the Meanings of War in Medieval South India', *The Medieval History Journal*, vol. 3, no. 2, 2000: 261–89..
11. The writings of Catherine Asher, Wayne Begley and Ebba Koch—see bibliography for details—are among the art historical writings (discussed in Section IV below) which have problematised issues of patronage and monarchical ideologies as articulated in Mughal architecture. Two articles by a historian of politics deal with an important architectural complex of the Delhi Sultanate: Sunil Kumar, 'Defining and Contesting Territory: The Delhi *Masjid-i Jāmī*' in the Thirteenth Century' (unpublished manuscript), and 'Assertions of Authority: A Study of the Discursive Statements of Two Sultans of Delhi', in Muzaffar Alam, Françoise 'Nalini' Delvoye and Marc Gaborieau (eds), *The Making of Indo-Persian Culture*, Delhi 2000: 37–65.

These focus on the Qutb complex as a series of 'discursive statements' of different power groups and interests in the Delhi Sultanate, raising what seems a pertinent question: to what extent can historians who are attempting to integrate artistic creations within their analytical agenda legitimately afford to bypass a serious engagement with the question of forms and visual vocabulary? I am grateful to Sunil Kumar for allowing me to read his unpublished typescripts, to which all quotes refer. An attempt, both innovative and scholarly, to transcend the disciplinary frontiers between art history, religion and cultural criticism is Richard Davis, *Lives of Indian Images*, Princeton 1997, reprint New Delhi 2000.

12. The notion of 'representation' as applicable to the domain of the arts was developed in a number of writings by Louis Marin. See especially *L'opacité de la peinture. Essais sur la représentation au Quattrocento*, Paris 1989, but also *Le portrait du roi*, Paris 1981. A collection of Louis Marin's writings, edited by Daniel Arasse *et al.*, appeared posthumously, entitled *De la représentation*, Paris 1994. In addition: Roger Chartier, 'Pouvoirs et limites de la représentation: Sur l'oeuvre de Louis Marin', *Annales: Histoire, Sciences Sociales*, mars-avril 1994: 407–18.
13. 'les opérations de découpage et de classement qui produisent les configurations multiples grâce auxquelles la réalite est perçue, construite, représentée . . .', Chartier, ibid.: 411.
14. 'opèrent la substitution à la manifestation extérieure où une force n'apparaît que pour annihilier une autre force . . . des signes de la force ou plutôt des signaux et des indices qui n'ont besoin que d'être *vus, constatés, montrés*, puis *récités* pour que la force dont ils sont les effets soit *crue*'. Louis Marin, *Des pouvoirs de l'image. Gloses*, Paris 1993: 14.
15. Pierre Nora, 'Entre mémoire et histoire. La problématique des lieux', in *Les lieux de mémoire*, Paris 1984: vol. 1, xxvii.
16. Benedict Anderson, *Imagined Communities: Reflections on the Origins and Spread of Nationalism*, London 1991 (revised edition): 214.
17. 'elle [l'histoire] impose sa loi aux régions lointaines qu'elle conquiert en croyant leur rendre la vie.'
18. Thomas R. Metcalf, *An Imperial Vision: Indian Architecture and Britain's Raj*, London 1989: 7–8.
19. Saidian approaches are too voluminous to enumerate here. Significant critiques relevant for the Indian context are Aijaz Ahmad, 'Between Orientalism and Historicism: Anthropological Knowledge of India', *Studies in History*, vol. 7, no. 1, 1991: 135–64; Sumit Sarkar, 'Orientalism Revisited: Saidian Frameworks in the Writing of Modern Indian History', *Oxford Literary Review*, vol. 16, 1994: 203–21; Sarkar, *Writing Social History*.
20. Ann Laura Stoler and Frederick Cooper, 'Between Metropole and Colony: Rethinking a Research Agenda', in Frederick Cooper and Ann Laura Stoler (eds), *Tensions of Empire: Colonial Cultures in a Bourgeois World*, Berkeley and London 1997: 1–56.
21. Dirks (ed.), *Colonialism and Culture*, Introduction: 4.

22. These terms recur in the large number of useful writings that address issues pertaining to colonialism and culture. To cite only a few: Bernard S. Cohn, *Colonialism and its Forms of Knowledge: The British in India*, New Delhi 1997; Tapati Guha-Thakurta, 'The Museumised Relic: Archaeology and the First Museum of Colonial India', *Indian Economic and Social History Review*, vol. 34, no. 1, 1997: 21–51; Carol A. Breckenridge, 'The Aesthetics and Politics of Colonial Collecting: India at World Fairs', *Comparative Studies in Society and History*, vol. 32, no. 2, 1989: 195–216; Catherine B. Asher and Thomas R. Metcalf (eds), *Perceptions of South Asia's Visual Past*, New Delhi 1994: 211–32; Thomas R. Metcalf, *Ideologies of the Raj*, Cambridge and New Delhi 1995. In his study of colonial narratives Daud Ali has refined the Saidian framework. Drawing upon the insights of psychoanalysis, he argues that colonial narratives had to constantly engage in 'maneuvers of othering and incorporating'. 'Recognizing Europe in India: Colonial Master Narratives and the Writing of Indian History', in Jeffrey Cox and Shelton Stromquist (eds), *Contesting the Master Narrative: Essays in Social History*, Iowa City 1998: 95–130.
23. See Sourindranath Roy, 'Indian Archaeology from Jones to Marshall (1784–1902)', *Ancient India*, no. 9, 1953: 4–27.
24. O.P. Kejariwal, *The Asiatic Society of Bengal and the Discovery of India's Past*, New Delhi 1988.
25. On Buchanan, Dilip K. Chakrabarty, *A History of Indian Archaeology from the Beginning to 1947*, New Delhi 1988: 27–9.
26. On Mackenzie, Chakrabarty, ibid.: 29–30; Dirks, 'Guiltless Spoliations'; in Asher and Metcalf (eds), *Perceptions*; Cohn. *Colonialism and its Forms of Knowledge*: 81–91.
27. Kejariwal, *The Asiatic Society*: 40–1; Chakrabarty, *A History*: 16–17, 44.
28. Roy, 'Indian Archaeology . . .': 7.
29. *Archaeological Survey of India Report*, 1862, I: iii–viii, cited in Roy, 'Indian Archaeology . . .': 10. While both Roy and Chakrabarty cite 1861 as the date of the establishment of the Archaeological Survey of India, admitting however the absence of clear documentary evidence to support this, Pramod Chandra places this event in 1865: see *On the Study of Indian Art*, Cambridge, Mass., 1983: 20.
30. For details, Chakrabarty, *A History*: 94–5.
31. Robert Sewell, *List of Antiquarian Remains in the Presidency of Madras*, Madras 1882; *List of Architectural and Archaeological Remains in Coorg*, Madras 1894; E.W. Smith, *The Moghul Architecture of Fathpur-Sikri*, 4 vols, 1894–8. For an exhaustive list of the writings of James Burgess, see Chakrabarty, *A History*: 100–1.
32. Chakrabarty, *A History*: 98; Partha Mitter, *Much Maligned Monsters: A History of European Reactions to Indian Art*, Oxford 1977: 183–6.
33. Tapati Guha-Thakurta, 'Orientalism, Nationalism and the Reconstruction of "Indian" Art in Calcutta', in Asher and Metcalf (eds), *Perceptions*: 52.
34. Printed at the Sayyid al-Akhbar Press, Delhi.

35. C.A. Bayly, *Empire and Information: Intelligence Gathering and Social Communication in India, 1780–1870*, Cambridge 1996: 195ff.
36. Delhi, Matba Sultani, 1854. There is a French translation of chapters II and III of this edition, together with information from chapter I. J.H. Garcin de Tassy, 'Description des monuments de Delhi en 1852, d'après le texte Hindoustani de Saiyid Ahmad Khan', *Journal Asiatique*, Ve série, XV, 1860: 508–36; XVI, 1860: 190–254, 392–451, 521–43; XVIII, 1861: 77–97. An attempt to translate this text in English was made by R. Nath, *Monuments of Delhi: A Historical Survey*, New Delhi 1979. However, in the course of his translation Nath changed the structure of the original text and omitted several sections and details. The excerpt included in this volume has been taken from a fourth reprint (1965) of the 1854 edition.
37. Bayly, *Empire and Information*: 196–9.
38. The former work has been cited in Christian W. Troll, 'A Note on an Early Topographical Work of Sayyid Ahmad Khan: *Āsār as-Sanādid*', *Journal of the Royal Asiatic Society*, 1972: 142. Also comparable in genre to this first edition of the *Asār as-Sanādīd* are the descriptions of encampments and journeys in Persian chronicles of the Mughal period: see, for example, Abu'l-Fazl 'Allami, *A'in-i Akbari* (tr. Blochmann and Jarrett), 3 vols, New Delhi: vol. I, 47–50; or the account of the Dar al-Khilāfat of Agra by Muhammad 'Arif Qandhari, *Ta'rikh-i Qandhāri* (tr. Michael Brand and Glenn D. Lowry), in *Fatehpur Sikri: A Sourcebook*, Cambridge, Mass., 1985: 290–5.
39. Troll, 'A Note . . .': 136.
40. *Journal of the Archaeological Society of Delhi*, 1850, Appendix: i, cited in Troll, ibid.: 141.
41. Ibid.: January 1853: 49–51, reprinted in Troll, ibid.: 145–6.
42. Preface, reprinted in this volume.
43. Ibid.
44. Cited in Troll, 'A Note . . . : 140.
45. In the Preface to this essay, Fergusson gives reasons for having chosen to study rock-cut temples as the starting point of a comprehensive investigation of Indian architecture—given that these temples were neither 'so interesting or so beautiful as the structural buildings of the same or subsequent ages'. Yet, from an entirely chronological point of view, they could be considered the earliest examples of architecture in India and therefore an appropriate entry point into a larger history of the subject. In addition, 'caves' were, in his view, perhaps the only object of antiquity in India that would evoke the interest of a European public in the absence of an extended knowledge of the history of Indian art.
46. An excerpt from this pioneering study has been reprinted in this book.
47. Guha-Thakurta, 'The Museumised Relic . . .': 32.
48. Lawrence Lipking, *The Ordering of the Arts in Eighteenth-Century England*, Princeton 1970.
49. D'Alembert, 'Discours préliminaire', in *Encyclopédie ou dictionnaire raisonné des sciences, des arts et des métiers* (1751–80), (ed.) Alain Pons, Paris 1986,

vol. 1: 119–24; Lipking, *The Ordering of the Arts*: 10; P.O. Kristeller, 'The Modern System of the Arts', *Journal of the History of Ideas*, vol. XII, 1951: 496–527; Edmund Burke, *Letter to a Noble Lord* (1975), cited in Lipking, *The Ordering of the Arts*: 174.

50. Joshua Reynolds, *The Works: Containing his Discourses, Idlers, a Journey to Flanders and Holland, and His Commentary on Fresnoy's Art of Painting*, 3rd edition, London 1801: vol. II, Discourse XIII (December 1786), pp. 136ff.
51. Lipking, *The Ordering of the Arts*: 10.
52. Johann Joachim Winckelmann, *Geschichte der Kunst des Alterthums*, Dresden 1763, reached a non-German-reading public first by way of extracts published in literary journals, and then through a succession of French, Italian and English translations, the first of which appeared in Paris in 1776. This was followed by an Italian edition, published in Rome in 1783–4 and considerably later by an English translation, first published in Boston in 1856.
53. Lipking, *The Ordering of the Arts*: 10–13, 172–3.
54. Winckelmann, *Geschichte der Kunst des Alterthums*, reprint Darmstadt 1972: 393.
55. Alex Potts, *Flesh and the Ideal: Winckelmann and the Origins of Art History*, New Haven and London 1994: chapter V. Also see my 'Imaging the Revolution: Gender and Iconography in French Political Prints', *Studies in History*, vol. 12, no. 1: 28ff.
56. Cited in Mitter, *Much Maligned Monsters*: 192.
57. Ibid.: 192–3.
58. Winckelmann, *Geschichte der Kunst*. This notion had significant cultural implications in Europe, to begin with, for it became an urgent public issue of debate and artistic production, in an overt and direct form in revolutionary France, and more indirectly elsewhere. See my 'Körper malen. Der imaginierte Staatskörper im revolutionären Frankreich', in Susanne Conze *et al.* (eds), *Körper macht Geschichte—Geschichte macht Körper. Studien zur Körpergeschichte*, Bielefeld 1999: 35–7.
59. James Fergusson, *The History of Indian and Eastern Architecture*, London 1876: 5–6; he voiced this belief in an earlier work as well, *A History of Architecture in All Countries*, 3 vols, London 1865: 5ff.
60. Raymond Head, *The Indian Style*, London 1986: 74ff; Metcalf, *An Imperial Vision*: 56–7.
61. The lecture was published under the same title in the *Journal of the Society of Arts*, 15, 1866: 71–80.
62. Fergusson's lecture of 1866 urged practising architects in England to study the underlying principles of Indian architecture rather than copy indiscriminately from different styles, 'On the Study . . .': 76; also Fergusson, *The History*: 5.
63. On some of these cults: Edmund Burke, *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*, London 1757; William Gilpin, *Three Essays: On Picturesque Beauty; On Picturesque Travel; and On Sketching Landscape*, London 1792; Uvedale Price, *Essay on the Picturesque as Compared with the Sublime and the Beautiful*, 3 vols, London 1810; David Punter, 'The Picturesque and the Sublime: Two Worldscapes', in Stephen Copley and Peter Garside (eds), *The Politics of the Picturesque: Literature, Landscape and Aesthetics since 1770*, Cambridge 1994: 220–39. On the notion of the picturesque with special reference to Indian architecture, Richard Temple, 'Picturesqueness in Reference to Architecture', *Transactions of the Royal Institute of British Architects*, vol. 5, 1889: 53–76.
64. Reynolds, 'Discourse . . .': 138ff.; Head, *The Indian Style*: 21–2.
65. Stefan Koppelkamm, *Der imaginäre Orient. Exotische Bauten des achtzehnten und neunzehnten Jahrhunderts in Europa*, Berlin 1987: 40–60; Head, *The Indian Style*; for a somewhat divergent view, Metcalf, *An Imperial Vision*: 18–21.
66. Head, *The Indian Style*: 85ff.
67. Stated in the Preface to the first edition of Fergusson, *The History*: XI.
68. Fergusson, *History of Architecture in All Countries*: V.
69. This notion has been discussed at length in ibid.: 42–72.
70. The emergence of a historical frame in an array of fields—the museum, the novel, poetic compositions—has been effectively traced by Stephen Bann, *The Clothing of Clio: A Study of the Representation of History in Nineteenth-Century Britain and France*, Cambridge 1984: especially chapters 4, 5 and 7.
71. Anderson, *Imagined Communities*: chapter 10.
72. Breckenridge, 'The Aesthetics and Politics . . .': 207–11.
73. Ibid.: 209.
74. One section of Fergusson's lecture of 1866 referred to 'the importance of the study as bearing on Indian questions only': 'On the Study . . .': 75.
75. Ibid.
76. James Fergusson, *Tree and Serpent Worship: or Illustrations of Mythology and Art in India in the First and Fourth Centuries After Christ: From the Sculptures of the Buddhist Topes of Sanchi and Amaravati*, London 1869, attempts an exercise of this kind. See also Cohn, *Colonialism*: 94–5; Guha-Thakurta, 'The Museumised Relic . . .': 37.
77. The notion has been coined by Pierre Bourdieu, *La distinction: Critique sociale du jugement*, Paris 1979.
78. Rajendralal Mitra, *The Antiquities of Orissa*, 2 vols, Calcutta 1875–80; Cohn, *Colonialism*: 95; Chakrabarty, *A History*: 97.
79. James Fergusson, *Archaeology in India with Especial Reference to the Works of Babu Rajendralal Mitra*, London 1884, reprint New Delhi 1982: 5; Cohn, *Colonialism*: 95.
80. Mitter, *Much Maligned Monsters*: 260.
81. Fergusson, *The History*: 47–8, 73–6, 176ff.
82. Ibid.: 10–12, 34–7.
83. He refers to them as a 'mixed race allied to the Dravidians, and now represented by the Gonds, Santals, Bhils etc.', ibid.: 12–14.
84. Ibid.: 13.
85. Ibid.: 310–19, 350ff. In a lecture delivered to the Royal Society of Arts,

London, on 15 June 1923, Sir John Marshall questioned Fergusson's judgements on the aesthetic qualities of different stylistic phases within the development of Indian art, arguing however within the same racial paradigm. According to Marshall, it was precisely the 'Aryo-Dravidian . . . fusion of races' which produced the richest flowering of Indian art. This, in his view, took place during the Gupta period. In classical Greece, argued Marshall, 'the keynote of culture was intellectualism', while in India after Gandhara this intellectuality gradually weakened and came to be absorbed into 'an essentially emotional Hinduism', which 'found its true voice only during the brief and spacious age of the Guptas, when the impulses of thought and art were accentuated to their highest degree . . .'. John Marshall, 'Influence of Race on Early Indian Art', *Rupam*, April 1924: 69–73; also Stella Kramrisch's notes on Marshall's lecture in the same issue: 73–6.

86. This was also pointed out in a contemporary review: see Metcalf, *An Imperial Vision*: 35.
87. Fergusson, *The History*: 45–6.
88. Metcalf, *An Imperial Vision*: 36.
89. Ibid.: 36–7.
90. Fergusson, *The History*: 490ff.
91. Vincent A. Smith, 'Graeco-Roman Influence on the Civilisation of Ancient India', *Proceedings of the Asiatic Society of Bengal*, 58, 1889: 209ff.
92. Ibid.: 209. For a reworked position on this question, Hermann Goetz, 'Imperial Rome and the Genesis of Classic Indian Art', *East and West*, vol. 10, 1959: 153ff, 261ff.
93. Edward B. Havell, *Indian Architecture: Its Psychology and Structure from Muhammadan Times to the Present Day*, London 1911: 1. An excerpt from this book has been reprinted in this collection. Havell's views on Indian art and architecture were developed in a series of writings: *A Handbook to Agra and the Taj, Sikandra, Fatehpur Sikri and the Neighbourhood*, London 1904; *Indian Sculpture and Painting*, London 1908; *The Ideals of Indian Art*, London 1911; *The Ancient and Medieval Architecture of India*, London 1915. For an account of Havell's career, Tapati Guha-Thakurta, *The Making of a New 'Indian' Art*, Cambridge 1992: 156–9.
94. Havell, *Indian Architecture*: 2.
95. The Platonic notion is the subject of a detailed study by Erwin Panofsky, *Idea: ein Beitrag zur Begriffsgeschichte der älteren Kunsttheorie*, Berlon 1989 (reprint); on Havell, Mitter, *Much Maligned Monsters*: 271ff.
96. Havell, *Indian Architecture*: 10.
97. Ibid.: 11.
98. Ibid.: 21–4.
99. Havell, *A Handbook to Agra*: 87.
100. Havell's book *The Ancient and Medieval Architecture of India* was subtitled *A Study in Indo Aryan Civilisation*, see Guha-Thakurta, *The Making*: 146–8, 181.
101. Gabriel Jouveau-Dubreuil, *Archéologie du sud de l'Inde*, 2 vols, Paris 1914.

[illegible] Chandra, *On the Study*: 28.
[illegible] discussed in Section III below.
[illegible] Fergusson, 'On the Rock-Cut Temples of India', *Journal of the Royal Asiatic Society*, 8, 1846: 30–92.
[illegible] Tabarty, *A History*: 104.
[illegible] 127.
[illegible]ection has been reprinted in this volume.
[illegible] Banerji, 'The Qutb Minar: Its Architecture and History', *Journal of the United Provinces Historical Society*, vol. x, part 1, 1937: 38–58.
[illegible] *A Historical Memoir*: 7.
Robert Hillenbrand, 'Political Symbolism in Early Indo-Islamic Mosque Architecture. The Case of Ajmir', *Iran*, vol. 26, 1988: 105–17; Anthony Welch, 'Architectural Patronage and the Past: The Tughlaq Sultans of India', *Muqarnas*, vol. 10, 1993: 311–22. Both these articles have been referred to and discussed by Kumar, 'Defining . . .': 9–12.
Discussed in Section VII below.
Percy Brown's two-volume study, *Indian Architecture: Buddhist and Hindu Periods* and *Indian Architecture: Islamic Period*, Bombay 1956, has for decades been a staple text for students. The extract reprinted here is an abridged form of Brown's chapters on Mughal architecture which appeared in 1957 in (ed.) Wolseley Haig, *The Cambridge History of India*, vol. IV, *The Mughal Period*.
The Orientalist notion of a 'classical' epoch in the history of a civilisation, when its achievements attained a peak from which they subsequently 'declined', has been unwittingly echoed in Ebba Koch's affirmation that Mughal architecture during the reign of Shah Jahan 'entered its classical phase', *Mughal Architecture: An Outline of Its History and Development (1526–1858)*, Munich 1991: 93.
Mortimer Wheeler (ed.), *Splendours of the East*, London 1970: Introduction.
All citations from Brown are from the extract reprinted in this collection.
See, for example, the study by S. Athar Abbas Rizvi and Vincent J.A. Flynn, *Fathpur-Sikri*, Bombay 1975. Also the critical review article of this book by Ziauddin Desai, *Islamic Culture*, vol. 52, January 1978: 57–67.
A textbook that replicates many of Brown's methodological assumptions and judgements is Satish Grover, *The Architecture of India: Islamic*, New Delhi 1981. More recently, two useful studies in the stylistic history of Mughal architecture, though seemingly conventional, advance the subject with greater accuracy, perceptive insights and a redressal of earlier imbalances. See Catherine B. Asher, *Architecture of Mughal India*, Cambridge and New Delhi 1995; Koch, *Mughal Architecture*. Asher's book is particularly significant for its problematisation of issues of patronage by the nobility and of regional styles. Koch's text, methodologically less innovative than her other writings, is highly informative and contains excellent plans and photographs. Both books provide comprehensive bibliographies. There is, unfortunately, no adequate survey of the architectural history of the pre-Mughal period.

118. For example, Nandlal Chatterji, 'The "Nawabi" Architecture of Lucknow', *Journal of the United Provinces Historical Society*, vol. IX, part II, 1936: 39–44; S.K. Banerji, 'The Historical Remains of the Early Years of Akbar's Reign, 1556–72', *Journal of the United Provinces Historical Society*, vol. XV, part II, 1942: 89–101; S.K. Banerji, 'The Monuments of Aurangzib's Reign', *Journal of the United Provinces Historical Society*, vol. XVI, 1943: 138–47; idem, 'Sher Shah as seen in his Monuments', *Journal of the United Provinces Historical Society*, vol. XVII, 1944: 39–58. More recently, Banmali Tandon, 'The Architecture of the Nawabs of Awadh 1722–1856', in Robert Skelton *et al.* (eds), *Facets of Indian Art*, London 1986: 66–75.
119. Excerpted here, together with another article on the mosque of Shaikh Abdu-in Nabi.
120. Discussed extensively by Guha-Thakurta, *The Making*: chapters 4, 5 and 6.
121. Ananda K. Coomaraswamy, 'Origin of the Buddha Image', *Art Bulletin*, vol. 9, June 1927: 287–317.
122. Ananda K. Coomaraswamy, 'Indian Architectural Terms', *Journal of the American Society of Oriental Art*, vol. 48, 1928: 250–75; Pramod Chandra, *On the Study*: 31.
123. Ibid.: 32–3.
124. Ananda K. Coomaraswamy, 'Ornament', *Art Bulletin*, vol. 21, 1939: 375–82, here 376–8.
125. Ananda K. Coomaraswamy, 'The Symbolism of the Dome', reprinted in abridged form in this collection.
126. Mohammed Mujeeb, 'The Qutb Complex as a Social Document', reprinted here.
127. Some examples: John Marshall, 'The Monuments of Muslim India', in Wolseley Haig (ed.), *The Cambridge History of India*, vol. 3, *Turks and Afghans*, Cambridge 1928; Wheeler (ed.), *Splendours of the East*; Andreas Volwahsen, *Islamisches Indien*, Munich 1969; Satish Grover, *The Architecture of India*; Ziauddin A. Desai. *Indo-Islamic Architecture*, New Delhi 1970; W.H. Siddiqi, *Fatehpur Sikri*, New Delhi 1972; John Burton-Page, 'Hind Architecture: The Mughal Schools', in *Encyclopaedia of Islam*, 2nd edition, Leiden 1971: 255–66; idem, 'Lahore Fort', 'The Red Fort', 'Fatehpur Sikri', 'Taj Mahal', in Wheeler (ed.), *Splendours of the East*; K.V. Soundara Rajan, *Islam Builds in India: Cultural Study of Islamic Architecture*, Delhi 1983.
128. This is, surprisingly, the title of a chapter in Asher, *Architecture*, which is otherwise scrupulous in avoiding clichés. Other writings often refer to the Bibi ka Maqbara at Aurangabad as the 'Mughal tomb gone to seed' or a 'crude caricature' of the Taj Mahal: Bamber Gascoigne, *The Great Moghuls*, London/New York 1971: 182. More recently, the use of a single material in Fatehpur Sikri has been described by an architect as an expression of 'architectural megalomania': Gautam Bhatia, *Silent Spaces and Other Stories of Architecture*, New Delhi 1994: 63.
129. See the article by R. Nath in this volume, which lends itself to such interpretations. See also his *The Immortal Taj Mahal: The Evolution of the Tomb in Mughal Architecture*, Bombay, 1972; *History of Mughal Architecture*, 2 vols, New Delhi 1982–5.

130. On these developments, see the seminal article by Ernst H. Gombrich, 'In Search of Cultural History' (1969), reprinted in *Ideals and Idols*, London 1979: 25–59; also Peter Burke, 'Origins of Cultural History', in *Varieties of Cultural History*, Cambridge 1997: 1–22.
131. Jakob Burckhardt, *Die Kultur der Renaissance in Italien*, Leipzig 1860, several English translations, of which one of the recent ones is *Civilization of the Renaissance in Italy*, Harmondsworth 1990; Johan Huizinga, *Herbst des Mittelalters: Studien über Lebens- und Geistesformen des 14. und 15. Jahrhunderts in Frankreich und in den Niederlanden*, Lepizig 1919, English translation, *The Waning of the Middle Ages*, Harmondsworth 1976; Johan Huizinga, *Kultur und Geschichte: Gesammelte Aufsätze*, Stuttgart 1954.
132. Arnold J. Toynbee, *A Study of History*, London 1934–61; Oswald Spengler, *The Decline of the West*, London 1919–22, cited in Burke, *Varieties*: 187.
133. Frederick Antal, *Florentine Painting and Its Social Background*, London 1947; Francis Klingender, *Art and the Industrial Revolution*, London 1947; Arnold Hauser, *The Social History of Art*, 4 vols, London 1951.
134. Timothy J. Clark, *The Absolute Bourgeois: Artists and Politics in France 1848–1851*, London 1973; idem, *Image of the People: Gustave Courbet and the 1848 Revolution*, London 1973; John Barrell, *The Dark Side of the Landscape*, Cambridge 1980; Pierre Francastel, *Peinture et société: naissance et destruction d'un espace plastique de la renaissance au cubisme*, Paris 1977, an extract has been translated in Maurice Aymard and Harbans Mukhia (eds), *French Studies in History*, vol. II, New Delhi 1991: 243–76; Griselda Pollock, *Vision and Difference: Femininity, Feminism and Histories of Art*, London 1988.
135. Clark, *Image*: 10ff.
136. Raymond Williams, *Culture and Society 1780–1950*, London 1958; idem, *The Long Revolution*, London 1961; E.P. Thompson, *The Making of the English Working Class*, London 1963, and *Customs in Common*, London 1991.
137. Williams, *Long Revolution*: 55.
138. Raymond Williams, *Marxism and Literature*, Oxford 1977.
139. E.P. Thompson, 'The Long Revolution', *New Left Review*, 9–10, 1961: 33ff.
140. Thompson, *Customs in Common*: 6ff.
141. On this subject see the persuasive essay by Sumit Sarkar, 'The Relevance of E.P. Thompson', in *Writing Social History*: 50–81.
142. Panofsky's principles of iconographic and iconological analysis have been developed in many of his writings, the most representative of which are: Erwin Panofsky, *Meaning in the Visual Arts: Papers in and on Art History*, New York 1955; idem, *Studies in Iconology: Humanistic Themes in the Age of the Renaissance*, New York 1967; idem, *Gothic Architecture and Scholasticism: An Enquiry into the Analogy of the Arts, Philosophy, and Religion in the Middle Ages*, New York 1976; Aufsatze zur Grundfragen der Kunstwissenschaft (eds), Hariolf Oberer and Egon Verheyen, Berlin 1980.

143. See especially Wayne Begley's analysis in 'The Myth of the Taj Mahal and a New Theory of its Symbolic Meaning', *Art Bulletin*, vol. 61, 1979: 7–37; idem, 'Amanat Khan and the Calligraphy on the Taj Mahal', *Kunst des Orients*, vol. 12, 1978–9: 5–39 and 'The Symbolic Role of Calligraphy on Three Imperial Mosques of Shah Jahan', in Joanna Williams (ed.), *Kala-darsana: American Studies in the Art of India*, New Delhi 1981: 7–18. Regrettably, for technical reasons it was not possible to reprint Begley's article on the Taj Mahal in this volume. In addition to the articles by Koch and Meister reprinted here, see Glenn D. Lowry, 'Humayun's Tomb: Form, Function and Meaning in Early Mughal Architecture', *Muqarnas*, vol. 4, 1987: 133–48.
144. Reprinted in this collection.
145. In spite of its touristic fame, there has not been much detailed scholarly literature on the Taj in recent years. See, however, Pratapaditya Pal, *et al.*, *Romance of the Taj Mahal*, Los Angeles/London 1989; Ebba Koch, 'Tadj Mahall', in *Encyclopedia of Islam* (new edition),vol. x: 58–60; the article by Lisa Golombek in this volume; the useful compilation and translation of sources by Wayne E. Begley and Ziauddin Desai, *Taj Mahal: The Illumined Tomb*, Cambridge, Mass., 1989; also Begley, 'Amanat Khan . . .'; Asher, *Architecture*: 209ff.
146. Begley, 'The Myth . . .': 11.
147. Ibid.: 25.
148. Investigated in depth in Begley, 'Amanat Khan . . .'
149. Ebba Koch, *Shah Jahan and Orpheus: The Pietre Dure Decoration and the Programme of the Throne in the Hall of Public Audiences at the Red Fort of Delhi*, Graz 1988.
150. The term has been used by Chartier, 'Pouvoirs et limites . . .': 412.
151. On the sources of Fatehpur Sikri's architecture, Ebba Koch, 'The Architectural Forms', in Michael Brand and Glenn D. Lowry, *Fatehpur Sikri*, Bombay 1987: 121–48, also in the same volume, Attilio Petruccioli, 'The Geometry of Power: The City's Planning': 49–64.
152. Marin, *Le portrait du roi*.
153. In his memoirs the *Futuhat-i Firuz Shahi*, Sultan Firuz Shah Tughluq wrote: 'Among the gifts which God bestowed upon me, His humble servant, was a desire to erect public buildings. So I built many mosques and *madrasas* and *khanqahs*, that the learned and the elders, the devout and the holy, might worship God in these edifices, and aid the kind builder with their prayers.' John Dowson (ed.), *The History of India as Told by Its Own Historians: The Posthumous Papers of the Late Sir H.M. Elliot*, Calcutta 1871: 128. At a more general level, Romila Thapar, *Cultural Transaction and Early India: Tradition and Patronage*, New Delhi 1987.
154. An important collection which brings together the products of this research is Barbara Stoler Miller (ed.), *The Powers of Art: Patronage in Indian Culture*, New Delhi 1992.
155. Ibid.: 10.
156. The following are only a sampling of Asher's work: 'Legacy and Legitimacy: Sher Shah's Patronage of Imperial Mausolea', in Katherine P. Ewing (ed.),

Shari'at and *Ambiguity in South Asian Islam*, Berkeley, 1988: 79–97; 'Sub-Imperial Palaces: Power and Authority in Mughal India', *Ars Orientals*, vol. 23, 1993: 281–302; 'Authority, Victory and Commemoration: The Temples of Raja Man Singh', *Journal of Vaishnava Studies*, vol. 3, no. 3, 1995: 25–36. Issues of patronage also form a significant focal point in Asher, *Architecture*.

157. Stoler Miller, *The Powers*: 9–10.
158. The article by George Michell included here is part of his detailed research on Vijayanagara. See, above all, *The Vijayanagara Courtly Style: Incorporation and Synthesis in the Royal Architecture of South India, 15th–17th Centuries*, New Delhi 1992; *Architecture and Art of Southern India: Vijayanagara and the Successor States*, Cambridge 1995.
159. Michell, *Architecture and Art*: 84ff., 145ff.; idem 'Courtly Architecture at Gingee under the Nayakas', *South Asian Studies*, vol. 7, 1991: 143–60.
160. Burton Stein, 'Patronage and Vijayanagara Religious Foundations', in Stoler Miller, *The Powers of Art*: 163.
161. Ibid.: 163–6.
162. Mehrdad Shokoohy, *The Oldest Islamic Monuments in India*, Leiden/New York 1988; idem, 'Architecture of Muslim Trading Communities in India', in Anna L. Dallapiccola and Stephanie Z.-A. Lallemant (eds), *Islam and Indian Regions*, Stuttgart 1993: 1, 291–319; idem, 'Architecture of the Sultanate of Ma'bar in Madura and Other Muslim Monuments in South India', *Journal of the Royal Asiatic Society*, n.s. vol. 1, 1991: 31–92; idem, 'Architecture of the Muslim Port of Qa'il on the Coromandel Coast, South India: Part One, History and the 14th–15th Century Monuments', *South Asian Studies*, vol. 9, 1993: 137–66; idem, 'The Town of Cochin and Its Muslim Heritage on the Malabar Coast, South India', *Journal of the Royal Asiatic Society*, n.s. vol. VIII, 1998: 351–94.
163. Shokoohy, 'Architecture of Muslim Trading Communities': 292–6.
164. Ibid.: 295.
165. Ibid.: 297. For examples of temples in Kerala, built according to a circular plan, see K.V. Soundara Rajan, *Temple Architecture in Kerala*, Trivandrum 1974: plate XI, Srivallabha Temple, Allepey District, 13th century; plate XIII, Visnu Temple, Tiruvanvandoor, Alleppey District, 14th century:
166. Asher, *Architecture*, 128–31.
167. On Serai Nur Mahal, Begley, 'Four Mughal Caravanserais . . .': 168–72.
168. Stephen Blake, *Shahjahanabad*: 53, lists six mosques commissioned by women of the royal family.
169. M. Abdullah Chaghtai, *Muslim Monuments of Ahmedabad through their Inscriptions*, Poona 1942: 15–16; 53–6; 63–4; 69ff.
170. Cited by Stella Kramrisch, *The Hindu Temple*, Calcutta 1946: 8.
171. Idem, 'Artist, Patron and Public in India', *The Far Eastern Quarterly*, vol. XV, no. 3, 1956: 337–8.
172. Ahsan J. Qaisar, *Building Construction in Mughal India. The Evidence from Painting*, New Delhi 1988.
173. Ibid.: 36.

174. Ibid.: chapter 2.
175. *Munshat Namakin*, quoted by Qaisar, *Building Construction*: 14; Ibn Khaldun, *Muqaddimah*: 363, 365; see also article by Chaghtai in this volume.
176. Zahiru'd-din Muhammad Babur Padshah *Ghazi, Babur-Nama* (trans. Annette S. Beveridge), reprint New Delhi 1979: 520.
177. See especially details in the miniature from the *Akbar Nama*, illustrating the construction activities at the Agra Fort, London, Victoria and Albert Museum. For good reproductions, Geeti Sen, *Paintings from the Akbarnama: A Visual Chronicle of Mughal India*, Delhi 1984: plates 30–3; also Qaisar, *Building Construction*: plates I-VIII, though their technical quality leaves much to be desired.
178. Abu'l Fazl Allami, *A'in-i Akbari*, tr. H. Blochmann, reprint New Delhi 1997: vol. I, 235–6.
179. Cited in Qaisar, *Building Construction*: 13.
180. *Babur Nama*: 520.
181. *Ta'rikh-i Akbari* (also referred to as *Ta'rikh-i Qandhāri*), cited in Qaisar, *Building Construction*: 13.
182. *The Travels of Ibn Battuta* (ed.), H.A.R. Gibb, New Delhi 1993: vol. III, 654–5; also Anthony Welch, 'Architectural Patronage and the Past: The Tughluq Sultans of Delhi', *Muqarnas*, vol. 10, 1993: 316; Qaisar, *Building Construction*: 6ff.
183. Qaisar, *Building Construction*.
184. *A'in-i Akbari*: vol. I, 232.
185. London, Victoria and Albert Museum, *c.* 1590, reprinted in Michael Brand and Glenn D. Lowry, *Akbar's India: Mughal Art from the City of Victory*, New York 1985: 39.
186. Qaisar, *Building Construction*: 7.
187. Begley, 'Amanat Khan': 21–2; also the author's article in this volume.
188. During the following year his rank was raised to that of *Hazari*, Begley, 'Amanat Khan': 15.
189. Ibid.: 26.
190. Kramrisch, 'Artist and Patron': 336.
191. *A'in-i Akbari*: I, 113.
192. Brand and Lowry, *Akbar's India*: 11, 123ff.
193. Michael Brand and Glenn D. Lowry (eds), *Fatehpur Sikri: A Sourcebook*, Cambridge, Mass., 1985: 257–8.
194. On the benefits of architecture, Muhammad 'Arif Qandhari, *Ta'rikh-i Akbari*, *c.* 1580–4, translated and cited in Brand and Lowry, *Sourcebook*: 290–1.
195. Kramrisch, 'Artist and Patron': 340–1.
196. Ibid.: 341.
197. Some important examples of such studies: Muzaffar Alam, *The Crisis of Empire in Mughal North India: Awadh and the Punjab, 1707–1748*, New Delhi 1986; André Wink, *Land and Sovereignty in India: Agrarian Society and Politics under the Eighteenth Century Maratha Svarajya*, Cambridge 1986; Chetan Singh, *Region and Empire: Punjab in the Seventeenth Century*, New Delhi 1991; Eaton, *The Rise of Islam*; for a synoptic historiographical overview, Alam and Subrahmanyam, *The Mughal State*.
198. Eaton, *The Rise of Islam*: 311.
199. Ibid.: 36–7, illustration.
200. See Ebba Koch, 'The Copies of the Qutb Minar', *Iran*, vol. 19, 1991: 95–107; also Anthony Welch and Howard Crane, 'The Tughluqs: Master Builders of the Delhi Sultanate', *Muqarnas*, vol. I, 1983: 138.
201. The reference here is to the Begumpuri Masjid in Delhi, which however was built only in 1343, as Eaton himself states: Eaton, *The Rise of Islam*: 37.
202. Perween Hasan, 'Sultanate Mosques and Continuity in Bengal Architecture', *Muqarnas*, vol. 6, 1989: 58–9.
203. Hasan, reprinted in this collection.
204. Inscription on the western façade, cited by Hasan, 'Sultanate Mosques': 58.
205. The only surviving plan of the mosque is that drawn up by Cunningham; see also Catherine Asher, 'Inventory of Key Monuments', in George Michell (ed.), *The Islamic Heritage of Bengal*, Paris 1984: 110.
206. Yolande Crowe, 'Reflections on the Adina Mosque at Pandua', in Michell (ed.), *The Islamic Heritage*: 156–7; Eaton, *The Rise of Islam*: 42.
207. On the hypostyle plan, Oleg Grabar, *The Formation of Islamic Art*, revised edition, New Haven and London 1987: chapter 3; discussed more fully further in section VII of this Introduction.
208. Eaton, *The Rise of Islam*: 45.
209. Ibid.: 47–9.
210. Hasan, 'Sultanate Mosques': 62–3.
211. David McCutchion, 'Hindu Muslim Artistic Continuities', in Michell (ed.), *The Islamic Heritage*: 219.
212. Hasan, 'Sultanate Mosques': 72.
213. See Asher in this volume.
214. Ibid.
215. Eaton, *The Rise of Islam*: 172.
216. Ibid.: 173–4.
217. Koch, *Mughal Architecture*: 94–5.
218. Stephen Dale, 'Islamic Architecture in Kerala: A Preface to a Future Study', in Dallapiccola (ed.), *Islam and Indian Regions*: I, 491.
219. Shokoohy, 'Architecture of Muslim Trading Communities'; idem, 'Architecture of the Sultanate of Ma'bar'; 'The Town of Cochin'.
220. Dale, 'Islamic Architecture': 492.
221. Ibid.: 493.
222. Shokoohy, 'Architecture of Muslim Trading Communities': 299.
223. Dale, 'Islamic Architecture': 494.
224. This had been the understanding of writers such as Vincent Smith, Hermann Goetz, Percy Brown and others; for a historiographical discussion, Anna L. Dallapiccola, 'Gods, Patrons and Images: Stone Sculpture at Vijayanagara', in Giles H.R. Tillotson (ed.), *Paradigms of Indian Architecture: Space and Time in Representation and Design*, New Delhi 1998: 138–40.

225. For a discussion of the writings of Sewell and, more recently, Rothermund and Kulke, see Philip Wagoner, '"Sultan Among Hindu Kings": Dress, Titles and Islamicization of Hindu Culture at Vijayanagara', *Journal of Asian Studies*, vol. 55, no. 4, 1996: 851ff.
226. Above all, the numerous writings of George Michell. See earlier footnotes and bibliography for details; also, Dallapiccola (ed.), *Vijayanagara—City and Empire*; John M. Fritz, George Michell and M.S. Nagaraja Rao, *Where Kings and Gods Meet: The Royal Centre at Vijayanagara, India*, Tucson 1984; John M. Fritz, 'Space and Meaning at Vijayanagara', in Kapila Vatsyayana (ed.), *Concepts of Space, Ancient and Modern*, New Delhi 1991.
227. See article by Michell in this volume.
228. Wagoner, 'Sultan Among Hindu Kings': 863–4.
229. Wagoner argues along these lines in his analysis of dress, ibid.
230. Giles H.R. Tillotson, *The Rajput Palaces: The Development of an Architectural Style, 1450–1750*, London/New Haven 1987, reprint New Delhi 1999.
231. A much-awaited addition to the list of survey accounts of architectural history is Michell, *Architecture and Art of Southern India*; similarly on the Deccan, George Michell and Mark Zebrowski, *Architecture and Art of the Deccan Sultanates*, Cambridge 1999.
232. Among the seminal writings of Foucault: *Discipline and Punish: The Birth of the Prison*, London 1977; *The Order of Things*, New York 1971; *Power/Knowledge: Selected Interviews and Other Writings*, 1972–7, New York 1989; 'The Subject and Power', in Hubert L. Dreyfus and Paul Rabinow (eds), *Michel Foucault: Beyond Structuralism and Hermeneutics*, Chicago 1982: 208–6.
233. Pierre Bourdieu, *La distinction: Critique sociale du jugement*, Paris 1979. English translation, *Distinction: A Social Critique of the Judgement of Taste*, Cambridge, Mass., 1984.
234. 'construite dans la négociation entre une proposition et une reception', Chartier, *Au bord de la falais: L' histoire entre certitudes et inquiétudes*, Paris 1998: 98. In the field of art history the principle of 'reception aesthetics' has found considerable resonance, the notion has been developed by Wolfgang Kemp, *Der Betrachter ist im Bild: Kunstwissenschaft und Rezeptionsästhetik*, Berlin 1992.
235. Mikhail Bakhtin, *The Dialogic Imagination: Four Essays*, Austin, Texas 1983; Fred Evans, 'Language and Political Agency: Derrida, Marx and Bakhtin', *The Southern Journal of Philosophy*, vol. XXVII, 1990: 505–23.
236. Marin, *Le portrait du roi*; idem, *De la représéntation*; Chartier, 'Pouvoirs et limites'.
237. To cite a few examples: Robert Hillenbrand, 'Political Symbolism . . .'; Anthony Welch, 'Architectural Patronage and the Past . . .', also Anthony Welch and Howard Crane, 'The Tughluqs: Master Builders'; William G. Klingelhofer, 'The Jahangiri Mahal of the Agra Fort: Expression and Experience in Early Mughal Architecture', *Muqarnas*, vol. 5, 1988: 153–69; Kumar, 'Defining and Contesting Territory' and 'Assertions of Authority'; D. Fairchild Ruggles, 'Humayun's Tomb and Garden: Typologies and Visual Order', in Attilio Petruccioli (ed.), *Gardens in the Time of the Great Muslim Empires*, Leiden 1997: 172–85; Gulru Necipoglu, 'Framing the Gaze in Ottoman, Safavid and Mughal Palaces', *Ars Orientalis*, vol. 23, 1993: 305–42; Richard Davis, *Lives*, also Davis in this volume.
238. Hillenbrand, 'Political Symbolism . . .': 109–10.
239. Kumar, 'Defining . . .': 4.
240. Ibid.: 5–18.
241. Ibid.: 26–7.
242. This, in a nutshell, is the argument of Kumar, 'Assertions of Authority . . .'
243. Kumar, 'Defining . . .': 75ff.
244. This understanding is implicit in many of the writings of Panofsky. It has been explicitly postulated by Louis Marin, 'L'être de l'image et son efficace', in *Des pouvoirs de l'image. Gloses*, Paris 1993: 10–15. Also Chartier, 'Pouvoirs et limites . . .': 415–16.
245. The term has been used by Stanley Fish, *Is There a Text in This Class? The Authority of Interpretive Communities*, Cambridge 1980, cited in Davis, *Lives*: 8.
246. Davis, *Lives*; idem, 'Trophies of War: The Case of the Chalukya Intruder', in Asher and Metcalf, *Perceptions*: 161–78; idem, 'Indian Art Objects', in this volume; idem, 'The Iconography of Ram's Chariot', in David Ludden (ed.), *Making India Hindu: Religion, Community and the Politics of Democracy in India*, New Delhi 1996: 27–54.
247. Davis, *Lives*: 89.
248. Ibid.: 195.
249. 'pour faire parler les choses muettes, leur faire dire ce qu'elles ne disent pas d'elles-mêmes sur les hommes, sur les sociétés qui les ont produites—et constituer finalement entre elles ce vaste réseau de solidaritiés et d'entr'aide qui supplée à l'absence du document écrite . . .', Lucien Febvre, 'Vers une autre histoire', in *Combats pour l'histoire*, Paris 1992: 428.
250. See the classic essay by Pierre Bourdieu, 'The Berber House' (1971), in Mary Douglas (ed.), *Rules and Meanings*, Harmondsworth 1973: 98–110. The concept of the habitus, prefigured in this essay, implies that the structures of everyday life—houses, villages, cities, the rhythms of work and leisure—embody the assumptions of age, gender, and social hierarchy upon which a particular way of life is built.
251. Articles by Petruccioli and Pieper. See also the excellent survey by Klaus Fischer, Michael Jansen and Jan Pieper, *Architektur des indischen Subkontinents*, Darmstadt 1987.
252. Attilio Petruccioli, 'Editorial', *Environmental Design*, no. 11, 1991: 6.
253. Attilio Petruccioli, *Fathpur Sikri: Città del sole et delle acque*, Rome 1988; Attilio Petruccioli and Thomas Dix, *Fatehpur Sikri*, Berlin n.d.: 7. Also Attilio Petruccioli, *Il giardino islamico: architecttura, natura, paesaggio*, Milan 1994.
254. Petruccioli and Dix, *Fatehpur Sikri*: 10.

255. Attilio Petruccioli, 'The Geometry of Power. The City's Planning', in Brand and Lowry, *Fatehpur Sikri*: 49–64, quotes, 55.
256. George Michell, 'Ritual Movement at Vijayanagara and Firuzabad', *Environmental Design*, no. 11, 1991: 80–9; also John M. Fritz, George Michell and M.S. Nagaraja Rao, *Where Kings and Gods Meet: The Royal Centre at Vijayanagara, India*, Tucson 1984; Eaton and Michell, *Firuzabad*.
257. Michell, 'Ritual Movement . . .': 89.
258. Ibid.
259. Kurt Erdmann, *Das anatolische Karavansaray*, 3 vols, Berlin 1961; Eleanor Sims, 'Trade and Travel: Markets and Caravanserais', in George Michell (ed.), *Architecture of the Islamic World*: 80–111.
260. See, however, Wayne Begley's study of four Mughal caravanserais reprinted here. Also by the same author, 'A Mughal Caravanserai Built and Inscribed by Amanat Khan, Calligrapher of the Taj Mahal', in Frederick M. Asher and G.S. Gai (eds), *Indian Epigraphy: Its Bearing on the History of Art*, New Delhi 1985: 283–9; Elizabeth S. Merklinger, 'The *Madrasa* of Mahmud Gawan in Bidar', *Kunst des Orients*, vol. 11, 1976–7: 145–57.
261. See Guy T. Petherbridge, 'The House and Society', in Michell (ed.), *Architecture of the Islamic World*: 176–208, who argues that it was from 'vernacular building technologies, with their intimate knowledge of local materials, that the better-known monumental constructions were derived', p. 176.
262. Attilio Petruccioli, 'Editorial', *Environmental Design*, 2, 1985: 5.
263. James L. Wescoat Jr., 'Early Water Systems in Mughal India', *Environmental Design*, 2, 1985: 51; on the building projects of the Tughluq sultans of Delhi, Shams-i Siraj Afif, *Ta'rikh-i Firuz Shāhi*, ed. Sir John Dowson, reprint Calcutta 1953: 34ff; Anthony Welch, 'Hydraulic Architecture in Medieval India: The Tughluqs', *Environment Design*, 2, 1985: 74–81; Mehrdad Shokoohy and Natalie Shokoohy, 'The City of Turquoise: A Preliminary Report on the Town of Hisar-i Firuza', *Environmental Design*, 2, 1985: 82–9.
264. Welch, ibid.: 75; Mehrdad Shokoohy and Natalie H. Shokoohy, 'Tughlaqabad, The Earliest Surviving Town of the Delhi Sultanate', *Bulletin of the School of Oriental and African Studies*, vol. 57, 1994: 519ff.
265. Excerpted from the author's monograph, *The Stepwells of Gujarat in Art-Historical Perspective*, New Delhi 1981.
266. Constance M. Villiers-Stuart, *Gardens of the Great Mughals*, London 1913; Marie Louise Gothein, *Indische Gärten*, Munich 1926; Sylvia Crowe, Sheila Haywood and Susan Jellicoe, *The Gardens of Mughal India*, London 1972; Elizabeth B. Moynihan, *Paradise as a Garden in Persia and Mughal India*; New York 1979; Richard Ettinghausen and Elizabeth B. MacDougall (eds), *The Islamic Garden*, Washington 1976; Hermann Forkl, Johannes Kalter, Thomas Leisten and Margareta Pavaloi (eds), *Die Gärten des Islam*, Stuttgart 1993.
267. Attilio Petruccioli (ed.), *Gardens*: for a critique of the essentialism built into a large number of writings on 'the Islamic garden', Gulru Necipoglu, 'The Suburban Landscape of Sixteenth Century Istanbul as a Mirror of Classical Ottoman Garden Culture', in the above volume: 32f; also Attilio Petruccioli, *Dar al-Islam: L'architettura del territorio nei paesi islamici*, Rome 1985.
268. See articles by Maria Eva Subtelny, Gauvin Bailey and James L. Wescoat Jr. in Petruccioli (ed.), *Gardens*.
269. Petruccioli, ibid.: ix.
270. Wescoat, 'Early Water Systems': 55–7; Ebba Koch, 'The Mughal Waterfront Garden', in Petruccioli (ed.), *Gardens*: 140–60.
271. Koch, ibid.: 142.
272. Rosalind O'Hanlon, 'Manliness and Imperial Service in Mughal North India', *Journal of the Economic and Social History of the Orient*, vol. 42, no. 1, 1999: 47–93; idem, 'Kingdom, Household and Body: Gender and the Construction of Imperial Service under Akbar' (forthcoming); I am grateful to the author for allowing me to read the unpublished typescript of this article, to which citations refer.
273. O'Hanlon, 'Kingdom, Household . . .': 2–3.
274. Described by Abu'l Fazl as a 'means of preserving the stability of human race', cited in ibid.: 13.
275. While the issue of male and female spaces in the houses of the Mughal nobility has been raised by K.K. Muhammed, he confines himself to citing Quranic injunctions or, at times, stray remarks by travellers, and does not really engage with the processes by which gendering was inscribed in architectural plans and spaces and their use. K.K. Muhammed, 'The Houses of the Nobility in Mughal India', *Islamic Culture*, vol. 60, no. 3, 1986: 81–104.
276. O'Hanlon, 'Kingdom, Household . . .'.
277. 'Pour détruire une société . . . de tous temps les conquérants ou les révolutionnaires . . . en détruisaient les monuments, par le feu ou la démolition. Parfois, ils arrivaient à les détourner. Ici comme ailleurs, l'usage va plus loin et plus profond que les codes de l'échange.'
278. Pandey, 'The Culture of History': 31.
279. Davis, *Lives*: chapters 3, 4 and 6.
280. The need to go beyond textual accounts and to reconstruct the functions of religious structures such as temples or mosques through the use of archaeology and oral history has been persuasively argued for by Nayanjot Lahiri, who has shown that 'systems of holy places and sacred spaces', while rooted in dominant scriptural traditions, engender their own set of meanings through a creative interaction with elements of other local histories and practices that proliferate outside of written discourses. Nayanjot Lahiri, 'Archaeological Landscapes and Textual Images: A Study of the Sacred Geography of Late Medieval Ballabgarh', *World Archaeology*, vol. 28, no. 2, 1996: 244–64.
281. This mosque, which forms a main part of the so-designated Qutb complex, has frequently been referred to as the *Quwwat-ul Islam masjid* or 'The Might of Islam'. Sayyid Ahmad Khan uses this term, though he also refers to the mosque as Delhi's Jāmi' Masjid. For a critical appraisal of the use of the former term, Kumar, 'Defining . . .': 7–8.

282. Oleg Grabar, *The Formation of Islamic Art*, revised edition, New Haven and London 1987: chapter 3.
283. Grabar, *The Formation*; Richard Ettinghausen and Oleg Grabar, *The Art and Architecture of Islam 650–1250*, New York/Harmondsworth 1987; George Michell (ed.), *Architecture of the Islamic World*, London/New York 1978; Henri Stern, 'Les origines de l'architecture de la mosquée Omeyyade', *Syria*, vol. 28, 1951: 269–79; Christian Ewert, *Denkmäler des Islam: von den Anfängen bis zum 12. Jahrhundert*, Mainz 1997.
284. See Page in this volume; Hillenbrand, 'Political Symbolism . . .'; Welch, 'Architectural Patronage . . .'; Kumar, 'Defining . . .'
285. Oleg Grabar, 'The Architecture of the Middle Eastern City from Past to Present: The Case of the Mosque', in Ira M. Lapidus (ed.), *Middle Eastern Cities*, Berkeley 1969: 26–46.
286. Grabar, *The Formation*: 102–4.
287. This practice was not confined to Delhi alone, it was followed in the mosques of Ajmer and Bayana. See the contributions of Meister and Shokoohy in this volume. That it was a common architectural ritual among rulers to 'quote' from such monuments of the past which enjoyed a particular aura, and thereby add on another layer of legitimacy to their own ambitions, can be gauged from the interesting study made by Ebba Koch of the 'copies' of the Qutb Minar. Koch, 'The Copies . . .'
288. See the article by Page in this volume.
289. The inscriptions of the Alai Darwaza have been transcribed by G. Yazdani, 'Inscriptions of the Khalji Sultans of Delhi and their Contemporaries in Bengal', *Epigraphia Indo-Moslemica*, 1917–18: 23–30; for an interpretation of these inscriptions, Kumar, 'Assertions of Authority . . .': 7ff.
290. Ronald Lewcock, 'Architects, Craftsmen and Builders: Materials and Techniques', in George Michell (ed.), *Architecture of the Islamic World*: 127, 133ff.
291. For a similar process in the Ajmer mosques, see Meister in this collection.
292. For an attempt to date this panel and locate it within the genre of scenes from the *Ramayana* and *Mahabharata*, see the brief article by R.B.K.N. Dikshit, 'A Panel Showing the Birth of Lord Krishna from the Qutb Mosque', *Journal of the United Provinces Historical Society*, vol. 17, 1944: 84–6.
293. As has been pointed out at great length by Page, Brown and Mujeeb.
294. Wheeler Thackston, 'The Role of Calligraphy', in Martin J. Frishman and Hasan-Uddin Khan (eds), *The Mosque: History, Architectural Development and Regional Diversity*, London 1994: 43–53.
295. See Page in this volume; Anthony Welch, 'Qur'an and Tomb: The Religious Epigraphs of Two Early Sultanate Tombs in Delhi', in Asher and Gai (eds), *Indian Epigraphy*: 261ff; Kumar, 'Contesting . . .': 38–40, though the latter seems to imply that these inscriptions belong only to the reign of Iltutmish, as part of a new discourse about the sultanate as an embodiment of a 'unitary' Islam.

Georges Marçais, 'L'urbanisme musulman', in *Mélanges d'histoire et d'archéologie de l'occident musulman*, vol. 1, Algiers 1957: 219–31; Grabar, 'The Architecture of the Middle Eastern City . . .'; Kenneth L. Brown, *People of Salé. Tradition and Change in Morocco City 1830–1930*, Manchester 1976; Janet L. Abu-Lughod, 'The Islamic City—Historic Myth, Islamic Essence, and Contemporary Relevance', *International Journal of Middle Eastern Studies*, vol. 19, 1987: 155–76; Eaton and Michell, *Firuzabad*.
Kumar, 'Defining . . .': 37.
Mohammed Mujeeb, *The Indian Muslims*, London 1967: 19–25. The question of what motivated Hindus, especially of the lower castes, to adopt Islam is a subject of much debate. See Richard Eaton, 'Approaches to the Study of Conversion to Islam in India', in Richard C. Martin (ed.), *Approaches to Islam in Religious Studies*, Tucson 1985: 109–11; Peter Jackson, *The Delhi Sultanate: A Political and Military History*, Cambridge 1999: 14–15.
Mujeeb, *The Indian Muslims*: 20.
H.A.R. Gibb (ed.), *The Travels of Ibn Battuta AD 1325–1354*, 3 vols, New Delhi 1993: III, 620–6.
See map based on Ibn Battuta's description, ibid.: 620.
Brown, *People of Salé*: part II; Besim Selim Hakim, *Arabic-Islamic Cities: Building and Planning Principles*, London 1986: chapter 2; Oleg Grabar, 'Cities and Citizens. The Growth and Culture of Urban Islam', in Bernard Lewis (ed.), *Islam and the Arab World*, London 1976: 89–100; Eleanor Sims, 'Trade and Travel: Markets and Caravanserais', in George Michell (ed.), *Architecture of the Islamic World*: 80–111; the most significant work on the Indian subcontinent is still C.A. Bayly, *Rulers, Townsmen and Bazaars: Northern Indian Society in the Age of British Expansion, 1770–1870*, Cambridge 1983.
Sims, 'Trade and Travel . . .': 111.
Ibid.
Cited in Mujeeb, *The Indian Muslims*: 234.
Travellers from Europe, like the Frenchman Bernier, pointed out that shops did not proudly display their wares, except for fruits and eatables or cattle. For customers of status never came to the shops; rather the merchant or dealer went around, paying his respects to old customers, getting to know new ones, carrying samples of goods and bringing back orders. François Bernier, *Travels in the Mughal Empire*, ed. Vincent A. Smith (2nd edition), New Delhi 1992: 247–8.
See Ebba Koch's article in this volume.
Aijaz Ahmad, 'Between Orientalism and Historicism: Anthropological Knowledge of India', *Studies in History*, vol. 7, no. 1, 1991: 155.

SECTION I

Indigenous Initiatives, Colonial Aesthetics, Nationalist Views



CHAPTER I.1

Āṣār as-Sanādīd*

SAYYID AHMAD KHAN

Preface to the Second Edition

Bismillāh al raḥmān al raḥīm
In the name of God, Most merciful and compassionate.

Az naqsh o nigār-i-dar o dīwār-i-shikasta
Aṣār padīdast sanādīd-i-'ajam rā.
From the pictures and figures of ruins [surviving]
Manifest are vestiges of the lords of 'ajam.



Praise be to God. Allah Most High in His mercy has gifted many a beneficence to this worthless man. He has given him eyes, ears, tongue and wisdom so that he may do everything after seeing, hearing and understanding it. He works in such ways that people are left to wonder. When can we thank such a Provider and why should man not appreciate Him. His greatest benefaction is that He has sent Prophets to guide us and saved us from going astray and put us on to the right path. Greater than this benefaction is that for the guidance of His people, He finally sent a Prophet whose mercy encompassed every sinner. O God! Just as our Prophet, Muhammad Mustafa, may peace be upon him has shown his mercy on the condition of us sinners, in the like manner but many more times, grant Your mercy on him, his

*Extracts from *Āṣār as-Sanādīd* (1854, rpt. Delhi, 1965), in Urdu. Translated by Meenakshi Khanna.

progeny and his followers, Amen! After this, Saiyid Ahmad Khan, son of Saiyid Muhammad Muttaqi Khan Bahadur, grandson of Jawad ud Daula Jawad 'Ali Khan Bahadur and maternal grandson of Nawab Dabir ud Daula Amin al Mulk Khwaja Farid ud Din Ahmad Khan Bahadur Muslah Jang, humbly states that in AH 1263, corresponding to AD 1846, I had written a book on the monuments of Dehli and had published it. At that time Mr Arthur Austin Roberts Sahib Bahadur, Collector and Magistrate of Shahjahanabad left for England and took that book and presented it before the Royal Asiatic Society. The members of the Society appreciated it very much and, one of the members, Colonel Saxon of the Court of Directors suggested that an English translation of the book would be very useful. When the aforesaid gentleman came back to Delhi he started translating this book with this humble one. The thought of compiling this book afresh and rectifying the defects that have occurred in the previous edition then crossed the mind. Praise be to God Most High that He fulfilled that wish and this book was completed the way the heart had desired.

This edition is superior to the earlier one in many respects:

(1) The first chapter of this edition briefly mentions the people of Hindustan and about its old and new administrations. This was not there in the first edition.

(2) The second chapter of the first edition mentioned only the fort of Shahjahanabad. Compared to the previous edition the second chapter here also contains a better description of this fort and apart from this mention is made of the various forts constructed and cities settled from the beginning to the present day.

(3) The issues that were included in the first and the third chapters of the earlier book have been combined together in the third chapter of this edition. In fact, mention is made of additional details acquired about certain old buildings already alluded to.

(4) The first book suffered from two shortcomings. Firstly, certain old monuments had not been correctly described. Secondly, in the earlier edition mistakes had crept in in the expositions at certain places. Both these errors have been rectified here.

(5) In the previous edition presentation of edifices was scattered and unarranged, now descriptions of all buildings are arranged in accordance to the year of their construction.

(6) Authorities for descriptions imparted in the first edition were not cited. Now, frequently, delineations are adduced alongwith the authority of the historical text from which these expositions are drawn and the name of the same has been entered in the footnote.

[illegible] feature of the present edition is that epigraphs have been en[illegible] in accordance to their original length and style of calligraphy in which [illegible] are inscribed on the old buildings. And this is the list of books from [illegible] this book has been compiled: *Taurīt-Muqaddas* (Old Testament), [illegible]*Khulāṣat-ut Tawārīkh, Silsilat-al Mulūk, Mahābhārat, Bhāgwat,* [illegible]*Akbarī, Jughrāfiya, Tāj-al Ma'āṣir, Tārīkh-i-Firishtah, Tūzak-i-*[illegible]*Akbar Nāma, Pothī Indraprastha Mahātam, Mir'āt-Aftāb Numā,* [illegible]*Qulub, Jawāhir-al Ḥurūf, Lubb-i-Tawārikh, Nuh Sipihr, Tārikh-*[illegible]*Allāh Khān, Tārikh-i-Fīroz Shāhī* (Ẓiyā' Barnī), *Tūzak-i-Tīmūrī,* [illegible]*Zarūrat, Khazā'in-al Futuh or Tārīkh-i-Alā'ī, Tārīkh-i-Shaikh 'Abdul* [illegible]*Futūḥāt-i-Fīroz Shāhi, Akhbār-al Akhyār, Tārīkh-i-Fīroz Shāhi* (Shams [illegible] 'Afif), *Ẓafarnāma-i-Tīmūrī, Shāhjahān Nāma, Kitāb* (Archaeologi[illegible]al Society of Bengal, Nos 3, 4, 6 and 7), *Kitāb* (Royal Asiatic Society, [illegible]6), *Haft Iqlīm, Tārīkh-i-Kashmīr, Pothīha-i-Bhāṭ, Taqwīm-al Buldān,* [illegible]*Ma'āsir-al Umarā', Qaṣīda-i-Hamziya, Ma'āsir-i-'Ālamgīrī, Zīch Muḥammad* [illegible]*Shahi, Markandī Purān*, Abul Fidā'.

[illegible] thank and offer my extreme gratitude to Colonel Saxon and Arthur [illegible]stin Roberts whose appreciation and partronage enabled me to com[illegible]ete this book which is means of distinction and commemoration of this [illegible]significant one.

[illegible]nd I also extend my gratitude to Mr Edward Thomas for it is with [illegible] help, generosity and encouragement alone that this book could be [illegible]published to the common benefit of readers near and far [reach a wide [illegible]adership].

[illegible] of Contents

[illegible]hapter One is a brief description of the various administrations of [illegible]Dehli.

[illegible]hapter Two is about the construction of forts and settlement of cities [illegible]of Dehli.

[illegible]hapter Three describes the various buildings constructed by kings [illegible]and nobles of Dehli.

[illegible]pilogue traces the inception and prevalence of Urdu.

[illegible]ppendix contains epigraphs of the ancient buildings.

Chapter 2

[illegible]able of Contents of Chapter Two of Āṣār as-Sanādīd describing the [illegible]construction of forts and settlement of the cities of Dillī:

No.	Name of fort or city	Name of original founder	Year of construction AH/AD	Particulars	Page no.
1.	Indrapat	Judhishtir	ca. 1450 BC	—	—
2.	Dehlī	Raja Dehlu	ca. 328 BC	—	—
3.	Purana Qil'a (Old Fort) or Dinpanah or Shergadh	Angapāl Tanwar	AH 57 AD 676	In AH 940 Humayun Bādshāh (king) rebuilt this fort and named it Dinpanah. Then Sher Shah also repaired it and named it Shergadh.	—
4.	Qil'a-i Rāi Pithorā (Fort of Rai Pithora)	Rai Pithora	AH 538 AD 1143	The western gate of this fort was called the Ghaznī Darwāza	—
	Qaṣr-i Safed (White Palace)	Qutab ud Din Aibak	AH 682 AD 1265	This place was constructed in the fort of Rai Pithora.	
5.	Kushk-i Lāl (Red Palace)	Ghiyas ud Din Balban	AH 664 AD 1265	This fort was constructed a few years before this date. This date marked the year of of his coronation but the Kushk pre-dated the rule of the Sultan (king).	—
6.	Qil'a-i Marzaghan (Marzagan Fort) or Ghiyāṣpur	Ghiyas ud Din Balban	AH 666 AD 1267	The tomb shrine of Hazrat Nizam-ud Din is here.	—
7.	Kilokhari or Qasr-i Mu'izzi (Fort of Mu'izzud din)	Mu'izz-ud Din Kaiqubad	AH 685 AD 1286	Humayun's tomb is situated within this fort.	—

	Kushk-i Lal (Red Citadel) or Naya Shahr (New City)	Jalal-ud Din Firoz Khalji	AH 688 AD 1289	—	83
	Kushk-i Sabz (Green Palace)	Jalal-ud Din Firoz Khalji		This was one of the palaces in the [citadel of] Kushk-i Lāl.	84
	Dehlī-ye 'Ala'ī ('Ala-ud din's Delhi) or Qil'a-i 'Ala'ī (Fort of 'Ala-ud din) or Kushk-i Sīrī (Citadel of Sīrī)	'Ala-ud Din Khalji	AH 703 AD 1303	—	84
	Qasr-i Hazar Sutūn (Palace of Thousand Pillars)	'Ala-ud Din Khalji	AH 703 AD 1303	This was one of the palaces in the Kushk-i Sīrī.	85
	Tughlaqā-bad	Tughlaq Shah	AH 721 AD 1321	—	86
	Adilābād or Muham-madabad or Imarat Hazār Sutun (Palace of Thousand Pillars)	Muhammad 'Adil Tughlaq Shah	AH 728 AD 1327	—	87

12.	Jahānpanāh	Muhammad 'Adil Tughlaq Shah	AH 728 AD 1327	This [city] joined the 'Ala-i Dehli to the Purānī Delhī [Old Delhi] Qil'a-i Rāi Pithorā.	89
	Kushk-i Bijay Mandal (Palace of the Victory Pavilion) or 'Bādi Manzil' (Wonder Mansion)	Muhammad 'Adil Tughlaq Shah	AH 728 AD 1327	This is one of the [celebrated] towers inside the walls of Jahānpanāh.	89
13.	Kushk-i Fīroz Shāh (Citadel of Firoz Shah) or Koṭla-i Fīroz Shāh (Fort of Firoz Shah)		AH 755 AD 1354	—	91
	Shahr-i Firozābād (City of Firozabad)	Firoz Shah	AH 755 AD 1354	This city was constructed along with the fort (lit. *koṭla*).	92
14.	Kushk-i Jahān Numā (Jahān Numā Palace) or Kushk-i Shikār (Hunting Palace)	Firoz Shah	AH 755 AD 1354	—	93
15.	Khiẓrābād	Khizr Khan	AH 821	—	93

Mubaraka-bad	Mubarak Shah	AH 837 AD 1433	—	94
Delhi-ye Sher Shāh (Sher Shah's Delhi).	Sher Shah	AH 948 AD 1541	The Kābulī Darwāza (Kabuli Gate) of this fort is still extant near the prison house.	95
Salimgadh or Nurgadh	Islam Shah	AH 953 AD 1546	A bridge was constructed here during the reign of Jahangir and since then it has been known as Nurgadh.	96
Qila-i Shāh Jahan (Fort of Shah Jahan)	Shah Jahan Badshah	AH 1048 AD 1638	Some of the Europeans, particularly Italians, were also involved in the construction of this fort. Some of the well-known buildings constructed by Shah Jahan in this fort are Dillī Darwāza (Delhi Gate), Lāhorī Darwāza (Lahori Gate) along with Chatta [or Bāzār-i Musaqqaf (Roofed Market)], Naqqār Khāna (Kettle-drum House) or Hatiyāpūl (Elephant Path), Diwān-i 'Ām (Hall of Public Audience) with the stone [marble] throne, Khāṣ Maḥal, Imtiyāz Maḥal or Rang Maḥal, Taṣwīr-i paccīkārī-i sangīn (Picture made of Stone inlay) of Orpheus the musician which is an imitation from the album of Raphael; Maṣauwar Baithak with [Mu]ṣamman Burj (Octagonal Pavilion), Asad Burj, Shāh Maḥal or Diwān-i Khās (Hall of Private Audience), Ḥammām (Bath), Motī Maḥal, Bāgh-i Ḥayāt Bakhsh with Sāwan Bhādun (Hayat Bakhsh Garden with Sawan and Bhadun Pavilions), Shāh Burj, Mahtāb Bāgh.	96

20.	Shāhjāhana-bād along with the descriptions of bāzārs and Faiz Nahr	Shah Jahan	AH 1058 AD 1648	This city, which belongs to this fort, is still flourishing and may God keep it so forever.	96

Qil'a-i Rāi Pithorā

When the control of Dillī [Delhi] slipped out of the hands of the Tanwars into the hands of the Chauhans and Rai Pithora became the king[1] he constructed this fort in Bikramajit Samvat 1200/AD 1143/AH 538. Even if the fort is absolutely destroyed now, fragments of the ramparts are found in some places. This fort is built on a small hill. The monuments surrounding it were cut into a moat which was filled with water drawn from the forests to that it was full of water all the year round. Bands (embankments) which were used to stop water are found at places even today. Traces of the western rampart of the fort and part of the moat on this side still survive. Remains of the *Ghaznī Darwāza* are also evident. When I measured the wall on this side of the moat with an astrolabe I found it to be 65 ft. above the level of the moat. I do not know the additional height of the part of the wall which is now broken. The remains of the rampart are very wide. The rampart and the tower have been first built from the side of the moat. Wherever the height of this wall meets the ground of the fort, leaving 17 ft. space, a wall of 21 ft. width was constructed. And, again, from the side of the fort, leaving 11 ft., a wall with a breadth of 8 ft. was built. I believe that this wall must have been topped with *kanguras* (merlons).

For a considerable time this fort was also the *dār-al khilāfat* (capital) of the Muslim Badshahs. Accordingly, Qutb-ud Din Aibak and Sultan Shams-ud Din Altamash [Iltutmish] also lived in this fort. In AH 688/AD 1289 when Sultan Jalal-ud Din Firoz Khalji settled a new city near *Kilokhari*, this city became famous as *Purānī Dillī* (Old Delhi). Historical accounts[2] note that when the notables of Dillī swore their allegiance to Sultan Jalal-ud Din Firoz Khalji they took him from the New City and sat him on the throne in the royal residence of the predecessor sultans in the *Purānī Dillī*. The royal residence of the earlier rulers was the *Qaṣr-i Safed* which was constructed by Sultan Qutb-ud Din Aibak in the fort of Rai Pithora. This confirms that the fort which is referred to as *Qil'a-i Dehli Kuhnā* (Fort of Old [City of] Delhi) in the *Tūzak-i Tīmūrī* is this very same.

Ghazni Darwāza

There was a huge gate on the western side of this fort. It is not known by what name this gate was called in the days of Rai Pithora but in the period of Muslim kings it was known as the *Ghaznī Darwāza*[3] because the troops from Ghazni had entered the fort through this gate. Besides this, there were nine other gates[4] in this fort.

Qaṣr-i Safed

In the *Qil'a-i Rāi Pīthorā* Sultan Qutab-ud Din Aibak, whose reign starts in AH 602/AD 1205, built a palace and named it *Qaṣr-i Safed*. This is the same palace[5] wherein Malik Ikhtiyar-ud Din Altagin, *wazīr* (a vicegerent or lieutenant of king) of Mu'izz-ud Din Bahram Shah, was assassinated in full court in AH 639/AD 1241. Sultan Nasir-ud Din Mahmud, son of Shams-ud Din Altamash, sat on the throne in the same palace. During the reign of Sultan Nasir-ud Din Maḥmud in AH 658/AD 1259 the ambassador of Halaku Khan was received and given an audience in such a magnificent court that even the heavens had not hitherto witnessed. Even the coronation of Ghiyas-ud Din Balban happened in this palace. But now there remains no sign of this palace.

Kushk-i Lāl

This palace as constructed by Ghiyas-ud Din Balban before he became the king. He made the *Qil'a-i Marzghan* near this palace after he became king. Historical accounts state[6] that when the notables of Dillī supported Jalal-ud Din Firoz Khalji and took him from *Kilokhari* to *Purānī Dillī* for his enthronement, the Badshah went from there to *Kushk-i Lāl* and dismounted at its door. The notables enquired why he had alighted and the king replied that this *Kushk* was built by my lord Ghiyas-ud Din Balban before he became the king. It is only proper that I extend same honour to it now as I used to in those days. This disposition reveals that this palace was built five or ten years before AH 664/AD 1265. Even after assuming authority the Badshah often lived there. Whenever[7] he desired to go hunting he came to this palace and rode out from here in the first watch of the night. Sultan 'Ala-ud Din Khalji[8] lived in this *Kushk* before he built the *Kushk-i Sīrī* and Sultan Ghiyas-ud Din Tughlaq[9] was also enthroned here. I have not seen the details of the structure of this *Kushk*, to identify the style of the edifice, in any book. But now there is no doubt that the building which is known as

Lāl Maḥal, near the *dargāh* of Sultanji [Nizam-ud Din Awliya], is a part of this *Kushk*. This palace is very pleasant and is built entirely with red stone. A two-storey structure was created with the use of pillars but now everything is dilapidated and is becoming worse each day. There are a few graves in this *Maḥal* because of which doubt was created about the identity of this structure. This doubt, however, remains no more and it is evident that as this place was made into a burial ground people eventually started making graves inside this desolate *Maḥal*.

Masjid Adīna-i Dehlī or Masjid-i Jāma 'Dehlī or Masjid Quwwat-al Islām

When in AH 587/AD 1191/Bikrami Samvat 1248[10] Qutb-ud Din Aibak the *sipāhsālār* (commander of the army) of Mu'izz-ud Din Muhammad bin Sam, alias Shihab-ud Din Ghauri, conquered Dillī he converted this temple into a mosque. He removed the idol from the temple and in whichever place—walls, doorways and pillars—images of deities were made, he either destroyed some absolutely or defaced them. But he preserved the structure of the temple as it was and using material from twenty-seven idol houses, costing five crores and forty seven lakh dilliwalas,[11] he dedicated them to this mosque. And on the eastern doorway he put an inscription recording the date of victory and his name.

In the history books this mosque is mentioned as *Masjid-i Adīnā-i Dehli* (Friday Mosque of Delhi) and *Masjid-i Jama Dehli* (Congregational Mosque of Delhi). But nowhere is this mosque called *Quwwat-al Islām* (Power/Strength/Virtue of Islam). It is not known when it was so called. Apparently, at the time when this temple was conquered and the mosque constructed it might have been named *Quwwat-al Islām*. But such mosques are seldom remembered by their original name and instead are known as Jama Masjid, just as the mosque at Shahjahanabad was originally named *Masjid-i Jahān Nūma* but is famous as the Jama Masjid.

Notes and References

1. Munshi Sujan Rai Bhandari, *Khulāsāt-ut Tawārīkh*, ed. Zafar Hasan, Delhi, 1918, p. 28.
2. Muhammad Qasim Firishtah, *Tārīkh-i-Firishtah*, Munshi Nawal Kishore, Kanpur, 1884, p. 89.
3. Ziya-al Din Barani, *Tārīkh-i-Firoz Shāhi*, ed. Saiyyid Ahmad Khan, West Germany, 1881 (rpt. of Calcutta edn, 1860–2).

4. *Tuzāk-i-Timūrī* [The Turkish original of the text was translated by Abu Talib Husaini who presented them to Shah Jahan a short time before AH 1047/AD 1637. These were brought down to AH 804 by Muhammad Afzal Bukhari with alterations and additions made in the translation of Abu Talib Husaini. I have consulted folio no. 46 of a manuscript copy (Acc. no. 15,879 MS 164 M5) of the latter, which is written in the hand of Munshi Bakhtawar Khan, in the Central Reference Library, University of Delhi.
5. *Tārīkh-i-Firishtah*, p. 69.
6. Ibid., p. 89.
7. Ibid., p. 77.
8. Ziya Barani, *Tārīkh-i-Firoz Shāhi*, pp. 246–7.
9. *Tārīkh-i-Firishtah*, p. 129; according to Firishtah, the enthronement of Ghiyas-ud Din Tughlaq took place in the *Qaṣr-i Hazār Sutūn* and not at *Kushk-i Lāl*.
10. Hasan Nizami, *Taj-al Ma'āsir*, unpublished. An English translation [by B.S. Mathur] based on an [unpublished] text edited by Professor S.A.H. Abidi is forthcoming and I am grateful to him for letting me use his handwritten manuscript for providing these references. For annexation of Delhi see pp. 153 to 157 of Professor Abidi's Text].
11. *Dilliwala* was a coin of that time. *Dilliwalas* of Pithora, Sultan Mu'izz-ud Din and Sultan Shams-ud Din are found even today. These are mentioned in the *Archaeological Society of Bengal*, Issue no. 4, pp. 30, 34, 36, 37, etc.

CHAPTER I.2

Indian Saracenic Architecture*

JAMES FERGUSSON

Introduction



From a very early period in the world's history a great group of civilised nations existed in Central Asia between the Mediterranean and the Indus. They lived apart, having few relations with their neighbours, except of war and hatred, and served rather to separate than to bring together the Indian and European communities which flourished beyond them on either hand.

Alexander's great raid was the first attempt to break through this barrier, and to join the East and West by commercial or social interchanges. The steady organisation of the Roman Empire succeeded in consolidating what that brilliant conqueror had sketched out. During the permanence of her supremacy the space intervening between India and Europe was bridged over by the order she maintained among the various communities established in Central Asia, and there seemed no reason why the intercourse so established should be interrupted. Unsuspected, however, by the Roman world, two nomade [*sic*] nations, uninfluenced by its civilisation, hung on either flank of this great line of communication, ready to avail themselves of any moment of weakness that might occur.

The Arabs, as the most impetuous, and nearest the centre, were the first to break their bounds; and in the course of the seventh century Syria, Persia, Egypt, and the north of Africa became theirs. Spain was conquered, and India nearly shared the same fate. Under Muawiah the

*Extracts from James Fergusson, *History of Indian and Eastern Architecture* (London, 1876), pp. 489–93, 557–68.

first Khalif[a] of the Ommiahs [Umayya], two attempts were made to cross the Indus by the southern route—that which the Scythians had successfully followed a short time before. Both these attempts failed, but under Walid, Muhamed Kasim, AH 99, did effect a settlement in Scinde [Sind]. It proved a barren conquest, however, for though a Mahomedan dynasty was established there, it soon became independent of the Khalifat [Caliphate], and eventually died out.

The supremacy of the Khalifat was as brief as it was brilliant. Its hour of greatest glory was about the year AD 800, in the reign of Haroun al-Rashid. From that time decay set in; and after two centuries more the effeminacy and corruption inherent in Eastern dynasties had so far progressed as to encourage the Northern hordes to move.

During the course of the eleventh century the Tartar hordes, who were hitherto only known as shepherds pasturing their herbs on the steppes of northern Asia, first made their appearance south of the Paropamisan range as conquerors; and for six centuries their progress was steadily onwards, till, in the year AD 1683, we find the Turks encamped under the walls of Vienna, and the Mogul Aurungzebe [Aurangzeb] lord paramount of the whole of India Proper, while Egypt and all the intervening countries owned the rule of sovereigns of Turanian race. [. . .] The architecture of the nations under the Arab Khalifat is of very minor importance. The ruling people were of semitic race, and had no great taste for architectural magnificence; and unless where they happened to govern a people of another stock, they have left few traces of their art.

With the Northern hordes the case was widely different; they were, without an exception, of Turanian blood, more or less pure, and wherever they went their mosques, and especially their tombs, remain to mark their presence, and to convey an idea of their splendour. In order to understand what follows, it is necessary to bear in mind that the semitic conquest, from Mecca as a centre, extended from the mouths of the Guadalquivir to those of the Indus, and left but little worthy of remark in architecture. The Turanian conquest, from Bokhara and Balkh as centres, extended from Constantinople to Cuttack, and covered the whole intervening space with monuments of every class. [. . .]

The Saracenic architects showed in India the same pliancy in adopting the styles of the various people among whom they had settled which characterised their [earlier] practice in the countries [conquered]. It thus happens that in India we have at least 12 or 15 different styles of Mahomedan architecture; and if an attempt were made to exhaust all

the examples, it would be found necessary to enumerate even a greater number. Meanwhile, however, the following 13 divisions will probably be found sufficient for present purposes:

1. The first of these is that of Ghazni, which, though not, strictly speaking, in India, had without doubt the most important influence on the Indian styles, and formed in fact the stepping-stone by means of which the architecture of the West was introduced into India, and it long remained the connecting link between the styles of the Eastern and those of the Western world. It would consequently be of the greatest importance in enabling us to understand the early examples of the style in India Proper, if we could describe this one with anything like precision, but for that we must wait till some qualified person visits the province.
2. Next to this comes the Pathan style of northern India (AD 1193–1554), spreading over the whole of Upper India, and lasting for about three centuries and a half. After the death, however, of Ala ud-din (AD 1316) the central power was at times so weak, that the recently conquered outlying provinces were frequently enabled to render themselves independent, and when this was the case, exhibited their individuality everywhere, by inventing a style of architecture expressive of their local peculiarities.
3. One of the first to exhibit this tendency was the brilliant but short-lived Sharki dynasty of Jaunpore [Jaunpur] (AD 1394–1476). Though existing for less than a century, they adorned their capital with a series of mosques and other buildings which are hardly surpassed by those of any city in India for magnificence, and by none for a well-marked individuality of treatment.
4. The style adopted by the Kings of Gujerat during their period of independence (AD 1396–1572) was richer and more varied than that of Jaunpore, though hardly so original or marked by such individuality. They borrowed too much, physically as well as intellectually, from the architecture of the Jains, among whom they were located, to be entirely independent; but the richness of their style is in proportion to the Hindu details they introduced.
5. Malwa became independent in AD 1401, and between that date and AD 1568, when they were absorbed in the Mogul empire, her kings adorned their capital at Mandu with palaces and mosques of great magnificence, but more similar to the parent style at Delhi than the two last-named styles, and wanting, consequently, in the local individuality.

6. Bengal was early erected into a separate kingdom—in AD 1203—more or less independent of the central power; and during its continuance—till AD 1573—the capitals, Gaur and Maldah, were adorned with many splendid edifices. Generally these were in brick, and are now so overgrown by jungle as to be either ruined or nearly invisible. They are singularly picturesque, however, and display all the features of a strongly-marked individuality of style.

These six divisions are probably sufficient to characterise the Mahomedan styles north of the Nerbudda [Narmada]. To the south of that river there are three well-marked styles.

7. First, that of the Bahmani dynasty. First at Kalburgah [Gulbarga], AD 1347, and afterwards at Bidar, AD 1426, they adorned their capitals with edifices of great magnificence and well-marked individuality, before they were absorbed, in AD 1525, in the great Mogul empire.
8. Next to these was the still more celebrated Adil Shahi dynasty of Bijapur (AD 1489–1660). Their style differed most essentially from all those above enumerated, and was marked by a grandeur of conception and boldness in construction unequalled by any edifices erected in India.
9. The third southern style is that of the Kutub Shahi dynasty of Golcondah, AD 1512–1672. Their tombs are splendid, and form one of the most striking groups in India, but show evident signs of a decadence that was too surely invading art at the age when they were erected.
10. One by one all these brilliant individualities were absorbed in the great Mogul empire, founded by Baber, AD 1494, and which, though practically perishing on the death of Aurungzebe, AD 1706, may be considered as existing till the middle of the [eighteenth] century, AD 1750. It is to this dynasty that Agra, Delhi, and most of the towns in northern India owe their most splendid edifices.
11. Before leaving this branch of the subject, it may be expedient to enumerate the style of Moslem art existing in Scinde. Practically, it is Persian, both in its form and the styles of decoration, and must have existed in this province from a very ancient time. All the examples, however, now known of it are comparatively modern, and bring us back, curiously enough, to the neighbourhood of Ghazni, from which we started in our enumeration.
12. Leaving these, which may be called the true styles of Mahomedan

architecture, we have two which may be designated as the bastard styles. The first of these is that of Oude [Awadh] (AD 1756–1847). In its capital there are ranges of building equal in extent and richness to those of any of the capitals above enumerated, but degraded in taste to an extent it is hardly possible to credit in a people who so shortly before had shown themselves capable of such noble aspirations.

13. The style adopted by the short-lived dynasty of Mysore (AD 1760–99), being further removed from the influences of European vulgarity, is not so degraded as that of Lucknow, but is poor and inartistic when compared with earlier styles.

In an exhaustive treatise on the subject, the styles of Ahmednugger [Ahmadnagar] and Arungabad [Aurangabad], AD 1490–1707, ought, perhaps, to be enumerated, and some minor styles elsewhere. These have not, however, sufficient individuality to deserve being erected into separate styles, and the amount of illustration that can be introduced into a work like the present is not sufficient to render the differences sensible to those who are not personally acquainted with the examples.

Even as it is, it would require a much more extensive series of illustrations than that here given to make even their most marked merits or peculiarities evident to those who have no other means than what such a work as this affords of forming an opinion regarding them. Each of these thirteen styles deserves a monograph; but, except for Bijapur[1] and Ahmadabad,[2] nothing of the sort has yet been attempted, and even the two works in which this has been attempted for these two capitals by no means exhaust the materials available for the purpose. Let us hope that these deficiencies will be supplied, and the others undertaken before long and before it is too late, for the buildings are fast perishing from the ravages of time and climate and the still more destructive exigencies of the present governing power in India.

Bijapur

If the materials existed for the purpose, it would be extremely interesting, from a historical point of view, to trace the various styles that grew out of each other as the later dynasties of the Dekhan [Deccan] succeeded one another and strove to surpass their predecessors in architectural magnificence in their successive capitals. With the exception, however, of Bijapur, none of the Dekhani cities produced any edifices that, taken

by themselves irrespective of their surroundings and historical importance, seem to be of any very great value in an artistic sense.

Burhampur [Burhanpur], which was the capital of the Faruki dynasty of Kandeish [Khandesh], from AD 1370–1596, does possess some buildings remarkable for their extent and picturesque in their decay, but of very little artistic value, and many of them—especially the later ones—in very questionable taste. Ahmednugger, the capital of the Nizam Shahi dynasty, AD 1490–1607, is singularly deficient in architectural grandeur, considering how long it was the capital of an important dynasty; while if Golcondah, the chosen seat of the Kutub Shahi dynasty, AD 1512–1672, has any buildings that are remarkable, all that can be said is that they have not yet been drawn or described. The tombs of the kings of this dynasty, and of their nobles and families, do form as extensive and as picturesque a group as is to be found anywhere; but individually they are in singularly bad taste. Their bases are poor and weak, their domes tall and exaggerated, showing all the faults of the age in which they were executed, but still not unworthy of a place in history if the materials existed for illustrating them properly.

As mentioned above, the Bahmani dynasty of Kalburgah maintained the struggle against the Hindu principalities of the south for nearly a century and a half, with very little assistance from either the central power at Delhi or their cognate states in the Dekhan. Before the end of the fifteenth century, however, they began to feel that decay inherent in all Eastern dynasties; and the Hindus might have recovered their original possessions, up to the Vindhya at least, but for the appearance of a new and more vigorous competitor in the field in the person of Yusaf Khan, a son of Amurath II of Anatolia. He was thus a Turk of pure blood, and, as it happens, born in Constantinople, though his mother was forced to fly thence while he was still an infant. After a varied career he was purchased for the bodyguard at Bidar, and soon raised himself to such pre-eminence that on the defeat of Dustur Dinar, in AD 1501, he was enabled to proclaim his independence and establish himself as the founder of the Adil Shahi dynasty of Bijapur.

For the first 60 or 70 years after their accession, the struggle for existence was too severe to admit of the Adil Shahis devoting much attention to architecture. The real building epoch of the city commences with Ali, AD 1557, and all the important buildings are crowded into the 100 years which elapsed between his accession and the wars with Aurungzebe, which ended in the final destruction of the dynasty.

During the period, however, their capital was adorned with a series of buildings as remarkable as those of any of the Mahomedan capitals of India, hardly excepting even Agra and Delhi, and showing a wonderful originality of design not surpassed by those of such capitals as Jaunpore or Ahmadabad, though differing from them in a most marked degree.

It is not easy now to determine how far this originality arose from the European descent of the Adil Shahis and their avowed hatred of everything that belonged to the Hindus, or whether it arose from any local circumstances, the value of which we can now hardly appreciate. My impression is, that the former is the true cause, and that the largeness and grandeur of the Bijapur style is owing to its quasi-Western origin, and to reminiscences of the great works of the Roman and Byzantine architects.

Like most Mahomedan dynasties, the Adil Shahis commenced their architectural career by building a mosque and madrissa [madrasa] in the fort at Bijapur out of Hindu remains. How far the pillars used there by them are *in situ*, or torn from other buildings, we are not informed. From photographs it would appear that considerable portions of them are used at least for the purposes for which they were intended; but this is not incompatible with the idea that they were removed from their original positions and readapted to their present purposes. Be this as it may, as soon as the dynasty had leisure to think really about the matter, they abandoned entirely all tendency to copy Hindu forms or Hindu details, but set to work to carry out a pointed-arched, or domical style of their own, and did it with singular success.[1]

The Jumma Masjid, which is one of the earlier regular buildings of the city, was commenced by Ali Adil Shah (AD 1557–79), and, though continued by his successors on the same plan, was never completely finished, the fourth side of the courtyard with its great gateway not having been even commenced when the dynasty was overthrown. Even as it is, it is one of the finest mosques in India.

It would have been, if completed, a rectangle of 331 ft. by 257 ft. The mosque itself is perfect, and measures 257 ft. by 145 ft. and consequently covers about 37,000 sq. ft. It consequently is in itself only a very little less than the mosque at Kalburgah; but this is irrespective of the wings, which extend 186 ft. beyond, so that if complete it would have covered about 50,000 sq. ft. to 55,000 sq. ft., or about the usual size of a mediaeval cathedral. It is more remarkable, however, for the beauty of its details than either the arrangement or extent of its plan.

Each of the squares into which it is divided is roofed by a dome of very beautiful form, but so flat as to be concealed externally in the thickness of the roof. Twelve of these squares are occupied in the centre by the great dome, 57 ft. in diameter in the circular part, but standing on a square measuring 70 ft. each way. The dimensions of this dome were immensely exceeded afterwards by that which covers the tomb of Mahmud, constructed on the same plan and 124 ft. in diameter; but the smaller dimensions here employed enabled the architect to use taller and more graceful outlines, and if he had had the courage to pierce the niches at the base of his dome, and make them into windows, he would probably have had the credit of designing the most graceful building of this class in existence.

If the plan of this mosque is compared with that of Kalburgah it will be seen what immense strides the Indian architects had made in constructive skill and elegance of detail during the century and a half that elapsed between the erection of these two buildings. If they were drawn to the same scale this would be more apparent than it is at first sight; but on half the present scale the details of the Kalburgah mosque could hardly be expressed, while the largeness of the parts, and regularity of arrangement can, in the scale adopted, be made perfectly clear in the Bijapur example. The latter is, undoubtedly, the more perfect of the two, but there is a picturesqueness about the earlier building, and a poetry about its arrangements, that go far to make up for the want of the skill and the elegance exhibited in its more modern rival.

The tomb which Ali Adil Shah commenced for himself was a square, measuring about 200 ft. each way, and had it been completed as designed would have rivalled any tomb in India. It is one of the disadvantages, however, of the Turanian system of each king building his own tomb, that if he dies early his work remains unfinished. This defect is more than compensated in practice by the fact that unless a man builds his own sepulchre, the chances are very much against anything worthy of admiration being dedicated to his memory by his surviving relatives.

His successor Ibrahim, warned by the fate of his predecessor's tomb, commenced his own, on so small a plan—116 ft. square—that, as he was blessed by a long and prosperous reign, it was only by ornament that he could render it worthy of himself. This, however, he accomplished by covering every part with the most exquisite and elaborate carvings. The ornamental inscriptions are so numerous that it is said the whole *Koran* is engraved on its walls. The cornices are supported by the most elaborate bracketing, the windows filled with tracery, and

every part so richly ornamented that had his artists not been Indians it might have become vulgar. The principal apartment in the tomb is a square of 40 ft. each way, covered by a stone roof, perfectly flat in the centre, and supported only by a cove projecting 10 ft. from the walls on every side. How the roof is supported is a mystery which can only be understood by those who are familiar with the use the Indians make of masses of concrete, which, with good mortar, seems capable of infinite applications unknown in Europe. Above this apartment is another in the dome as ornamental as the one below it, though its only object is to obtain externally the height required for architectural effect, and access to its interior can only be obtained by a dark narrow stair in the thickness of the wall.

Besides the tomb, there is a mosque to correspond; and the royal garden, in which these are situated, is adorned, as usual, internally with fountains and kiosks, and externally with colonnades and caravanserais for strangers and pilgrims, the whole making up a group as rich and as picturesque as any in India, and far excelling anything of the sort on this side of the Hellespont.

The tomb of his successor, Mahmud, was in design as complete a contrast to that just described as can well be conceived, and is as remarkable for simple grandeur and constructive boldness as that of Ibrahim was for excessive richness and contempt of constructive proprieties. It is constructed on the same principle as that employed in the design of the dome of the great mosque but on so much larger a scale as to convert into a wonder of constructive skill what, in that instance, was only an elegant architectural design.

The plan is internally a square apartment, 135 ft. each way; its area consequently is 18,225 sq. ft. while that of the Pantheon at Rome is, within the walls, only 15,833 sq. ft.; and, even taking into account all the recesses in the walls of both buildings, this is still the larger of the two.

At the height of 57 ft. from the floor-line the hall begins to contract, by a series of pendentives as ingenious as they are beautiful, to a circular opening 97 ft. in diameter. On the platform of these pendentives the dome is erected, 124 ft. in diameter, thus leaving a gallery more than 12 ft. wide all round the interior. Internally, the dome is 175 ft. high, externally 198 ft., its general thickness being about 10 ft.

The most ingenious and novel part of the construction of this dome is the mode in which its lateral or outward thrust is counteracted. This was accomplished by forming the pendentives so that they not only cut

the angles, but that their arches intersect one another, and form a very considerable mass of masonry perfectly stable in itself; and, by its weight acting inwards, counteracting any thrust that can possibly be brought to bear upon it by the pressure of the dome. If the whole edifice thus balanced has any tendency to move, it is to fall inwards, which from its circular form is impossible; while the action of the weight of the pendentives being in the opposite direction to that of the dome, it acts like a tie, and keeps the whole in equilibrium, without interfering at all with the outline of the dome.

In the Pantheon and most European domes a great mass of masonry is thrown on the haunches, which entirely hides the external form, and is a singularly clumsy expedient in every respect compared with the elegant mode of hanging the weight inside.

Notwithstanding that this expedient gives the dome a perfectly stable basis to stand upon, which no thrust can move, still, its form is such that it appears almost paradoxical that such a building should stand. If the section represented an arch or a vault, it is such as would not stand one hour; but the dome is itself so perfect as a constructive expedient, that it is almost as difficult to build a dome that will fall as it is to build a vault that will stand. As the dome is also, artistically, the most beautiful form of roof yet invented, it may be well, before passing from the most extraordinary and complex example yet attempted anywhere, to pause and examine a little more closely the theory of its construction.

Let us suppose the plan of a perfectly flat dome 100 ft. in diameter, and each rim consequently 10 ft. wide.

Further assuming for convenience that the whole dome weights 7,850 tons, the outer rim will weigh 2,826 tons, or almost exactly as much as the three inner rims put together; the next will weigh 2,204, the next 1,568, the next 942, and the inner only 314; so that a considerable extra thickness might be heaped on it, or on the two inner ones, without their preponderance at all affecting the stability of the dome; but this is the most unfavourable view to take of the case. To understand the problem more clearly, let us visualise a semicircle to represent the section of a hemispherical dome. The first segment of this, though only 10 ft. in width, will be 30 ft. in height, and will weigh 9,420 tons; the next, 10 ft. high and 10 ft. wide, will weigh 3,140; the third, 10 ft. by 6 ft., will weigh only 1,884; the fourth will weigh 942; and the central portion, as before, 316 [*sic*].

Now it is evident that the first portion, being the most perpendicular,

is the one least liable to disturbance or thrust, and, being also two-thirds of the whole weight of the dome, if steady and firmly constructed, it is a more than sufficient abutment for the remaining third, which is the whole of the rest of the dome.

It is evident how easy it must be to construct the first segment from the springing; and if this is very solidly built and placed on an immoveable basis, the architect may play with the rest; and he must be clumsy indeed if he cannot make it perfectly stable. In the East they did play with their domes, and made them of all sorts of fantastic forms, seeking to please the eye more than to consult the engineering necessities of the case, and yet it is the rarest possible contingency to find a dome that has fallen through faults in the construction.

In Europe architects have been timid and unskilled in dome-building; but with our present engineering knowledge it would be easy to construct far larger and more daring domes than even this of Mahmud's tomb, without the smallest fear of accident.

The external ordonnance of this building is as beautiful as that of the interior. At each angle stands an octagonal tower eight storeys high, simple and bold in its proportions, and crowned by a dome of great elegance. The lower part of the building is plain and solid, pierced only with such openings as are requisite to admit light and air; at the height of 83 ft. a cornice projects to the extent of 12 ft. from the wall, or nearly twice as much as the boldest European architect ever attempted. Above this an open gallery gives lightness and finish to the whole, each face being further relieved by two small minarets.

The same daring system of construction was carried out by the architects of Bijapur in their civil buildings. The great Audience Hall, for instance opens in front with an arch 82 ft. wide, which, had it been sufficiently abutted, might have been a grand architectural feature; as it is, it is too like an engineering work to be satisfactory. Its cornice was in wood, and some of its supports are still in their places. Indeed, it is one of the peculiarities of the architecture of this city that, like the English architects in their roofs, those of Bijapur clung to wood as a constructive expedient long after its use had been abandoned in other parts of India. The Ashur Moobaruk, one of the most splendid palaces in the city, is entirely open on one side, the roof being supported only by two wooden pillars with immense bracket-capitals; and the internal ornaments are in the same material. The result of this practice was the same at Bijapur as in England—far greater depth of framing and greater richness in architectural ornamentation, and an intolerance of constructive awkwardness which led to the happiest results in both countries.

Among the principal edifices in the city is one of those seven-storeyed palaces which come across us so strangely in all out-of-the-way corners of the world. Add to this that the Ashur Moobaruk has been converted by the Mahomedans into a relic-shrine to contain some hairs of the Prophet's beard, and we have a picture of the strange difficulty of weaning a Tartar from the innate prejudices of his race.

Besides these two there are five other palaces within the walls, some of them of great splendour, and numberless residences of the nobles and attendants of the court. But perhaps the most remarkable civil edifice is a little gateway, known as the Mehturi Mehal ('The Gate of the Sweeper'), with a legend attached to it too long to quote here. It is in a mixed Hindu and Mahomedan style, every part and every detail covered with ornament, but always equally appropriate and elegant. Of its class it is perhaps the best example in the country, though this class may not be the highest.

The gigantic walls of the city itself, 6 miles in circumference, are a work of no mean magnitude, and, combined with the tombs of those who built them, and with the ruins of the suburbs of this once great city, they make up a scene of grandeur in desolation, equal to anything else now to be found even in India.

Scinde

Among the minor styles of Mahomedan art in India there is one that would be singularly interesting in a historical sense if a sufficient number of examples existed to elucidate it, and they were of sufficient antiquity to connect the style with those of the West. From its situation, almost outside India, the province of Scinde must always have had a certain affinity with Persia and the countries lying to the westward of the Indus, and if we knew its architectural history we might probably be able to trace to their source many of the forms we cannot now explain, and join the styles of the East with those of the West in a manner we cannot at present pretend to accomplish.

It is doubtful, however, whether the materials are in existence for doing this. The buildings in this province were always in brick, no stone being available; and though they are not exposed to the destructive agencies of vegetation like those of Bengal, the mortar is bad, and the bricks are easily picked out and utilised by the natives to build their huts or villages.

All we at present know belong to a series of tombs in the neighbourhood of T[h]atta which were erected under the Mogul dynasty by the

governors or great men of the province, during their sway. At least the oldest now known is that of Amir Khalleel Khan, erected in or about AD 1572, the year in which Akbar deposed the Jami dynasty and annexed Scinde to his empire. No tombs or mosques of the earlier dynasties have yet been edited, though they may exist. The known series extends from AD 1572 to 1640, and all show a strongly-marked affinity to the Persian style of the same of an earlier age. One example must for the present suffice to explain their general appearance, for they are all very much alike. It is the tomb of the Nawab Amir Khan, who was governor of the province in the reign of Shah Jehan, from AD 1627 to 1632, and afterwards AD 1641 to 1650. The tomb was built apparently about AD 1640. It is of brick, but was, like all the others of its class, ornamented with coloured tiles, like those of Persia generally, of great beauty of pattern and exquisite harmony of colouring. It is not a very monumental way of adorning a building, but as carried out on the dome of the Rock at Jerusalem, in the middle of the sixteenth or in the mosque at Tabreez in the beginning of the thirteenth century, and generally in Persian buildings, it is capable of producing the most pleasing effects.

Like the other tombs in the province, it is so similar to Persian buildings of the same age, and so unlike any other found at the same age in India Proper, that we can have little doubt as to the nationality of those who erected them.

Notes and References

1. *Architecture of Beejapore*, Photographed from Drawings by Capt. Hart and A. Cumming, C.E., and on the spot by Col. Biggs and Major Loch, with text by Col. Meadows Taylor and J. Fergusson, Murray, 1866.
2. *Architecture of Ahmedabad*, 120 Photographs by Col. Biggs, with text by T.C. Hope, B.C.S. and Jas Fergusson, Murray, 1866.
3. Bijapur has been singularly fortunate, not only in the extent, but in the mode in which it has been illustrated. A set of drawings—plans, elevations, and details—were made by a Mr A. Cumming, C.E., under the superintendence of Capt. Hart, Bombay Engineers, which, for beauty of drawing and accuracy of detail, are unsurpassed by any architectural drawings yet made in India. These were reduced by photography, and published by me at the expense of the Government in 1859, in a folio volume with seventy-four plates, and afterwards in 1866 at the expense of the Committee for the Publication of the Antiquities of Western India, illustrated further by photographic views taken on the spot by Col. Biggs, R.A.

CHAPTER I.3

Indian Architecture*

E.B. HAVELL

Hindu and Saracenic Art—The Pointed Arch—The Migrations of Craftsmen—The First Muhammadan Invaders of India



The student who tries to thread his way through the somewhat bewildering mazes of Indian art is often confused by the classifications and analysis of European writers. First, by the Graeco-Roman or Gandharan theory of the inspiration of Buddhist sculpture; next by a misunderstanding of the whole theory of Indian art in the medieval or Puranic period, and by the sectarian classification of Buddhist–Hindu architecture; and third, by the attribution of the masterpieces of painting and architecture in the Muhammadan period to the superior creative and constructive genius of Islam, or, as in one notable instance, the Taj Mahall, to the art of Europe.

All of these misconceptions have their root in one fixed idea, the belief that true aesthetic feeling has always been wanting in the Hindu mind, and that everything really great in Indian art has been suggested or introduced by foreigners.

Fergusson, though generally far in advance of his time in the appreciation of Indian art, was by no means free from these prejudices, and his analysis of Indian architecture of the Muhammadan period confirms the general belief of the present day that between Hindu and Saracenic ideals there is a great gulf fixed, and that the zenith of Mogul

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architecture in the reigns of Jahangir and Shah Jahan was only reached by throwing off the Hindu influences which affected the so-called 'mixed' style of Indo-Muhammadan art. Fergusson distinctly declares that 'there is no trace of Hinduism in the work of Jahangir and Shah Jahan'.[1] Though he does not lend his great authority to the legend I have discussed in detail elsewhere, which makes the Taj Mahall the creation of an Italian adventurer in Shah Jahan's service, he treats all of Jahangir's and Shah Jahan's buildings as not being of Indian origin, but as entirely conceived by architects of western Asia, and suggests Samarkand, rebuilt by Timur (AD 1393–1404), as the locality which would throw light on 'the style which the Moguls introduced into India'.

This persistent habit of looking outside of India for the origins of Indian art must necessarily lead to false conclusions. One may find primitive types, or any of the forms and symbols which Indian artists moulded to their own desires, and trace them back to their archaic roots in Chaldaea, Babylon, Assyria, Persia, or Greece; but for the vital creative impulse which inspired any period of Indian art, whether it be Buddhist, Jain, Hindu, or Muhammadan, one will only find its source in the traditional Indian culture planted in Indian soil by Aryan philosophy, which reached its highest artistic expression before the Mogul dynasty was established, and influenced the greatest works of the Muhammadan period as much as any others. The Taj, the Moti Masjid at Agra, and the Jami' Masjid at Delhi, and the splendid Muhammadan buildings at Bijapur were only made possible by the not less splendid monuments of Hindu architecture at Mudhera, Dabhoi, Khajuraho, Gwalior, and elsewhere, which were built before the Mogul Emperors and their viceroys made use of Hindu genius to glorify the faith of Islam.

The Anglo-Indian and the tourist have been taught to admire the former and to extol the fine aesthetic taste of the Moguls; but the magnificent architectural works of the preceding Hindu period, when Indian sculpture and painting were at their zenith, but rarely attract their attention, though in massive grandeur and sculpturesque imagination they surpass any of the Mogul buildings. Even the term 'Mogul' architecture is misleading, for as a matter of fact there were but few Mogul builders in India. The great majority of the builders employed by the Moguls—including not only the humbler artisans but the master-minds which directed them—were Indians, or of Indian descent. Some were professed Muhammadans, but many were Hindus. Mogul

architecture does not bear witness, as we assume, to the finer aesthetic sense of Arab, Persian, or Western builders, but to the extraordinary synthetical power of the Hindu artistic genius.

The truth of this statement can be demonstrated not only from documentary evidence, which may or may not be trustworthy, but from the incontrovertible record of the buildings themselves. Western writers have been so eager to seize upon the divergences between Muhammadan and Hindu civilisation, that the common basis which underlies them both generally fails to impress them. Even the main point of difference which divided Muhammadan and Hindu—the use of anthropomorphic symbols—was not by any means essential to Hinduism; and but for the differences, sectarian and racial, which drove many Hindus into the service of Musulman states beyond the northwest frontier, the Muhammadan conquest of Hindustan would have been hardly possible.

The fundamental antagonism between Hindu and Musulman religious beliefs which we so often assume, never existed at any time. The basis of Muhammad's idealism was the concept of the Unity of the Godhead—'There is One God'—which is only a condensation of the Hindu concept of the Godhead manifesting itself in all things animate and inanimate. To the simple-minded Arab, either a mariner on the wide ocean or living in tents in the vast expanse of the lonely desert, the idea of the Divine Unity made an irresistible appeal: it sufficed to explain that infinite vastness of sky and earth and sea which surrounded him everywhere by day and night. His whole instinct of art creation was to draw everything in pure outline silhouetted against the sky, as he saw things in the glare of the open desert by day, or in the mysterious splendour of star- and moon-light, like the rocky coasts of Arabia seen from ships at sea.

All Arab design, whether in architecture, in the forms of domestic utensils, or in surface decoration, was distinguished by this feeling for pure outline and colour, rather than by a plastic treatment of surfaces or the massing of forms for contrast of light and shade in which the Hindu architectural genius especially asserted itself. Practically all Saracenic symbolism in architecture was borrowed directly or indirectly from India, Persia, Byzantium, or Alexandria, though devout Muhammadans put their own reading into the symbols they borrowed, just as the early Christians did with those they borrowed from paganism.

Even the pointed arch only acquired from India the religious significance which eventually led the Saracenic builders to adopt it as

their own, through the contact of the Arabs with the Buddhists of Western Asia; and thus the very feature by which all Western writers have distinguished Saracenic architecture from the indigenous architecture of India was originally Indian. If this proposition is opposed to all architectural authority in Europe at the present day, it is only because Western writers, through treating Indo-Muhammadan architecture as a subdivision of the Saracenic schools of Egypt, Spain, Arabia, and Persia, have left out of account the great mass of historical evidence bearing upon the arts of the West which is afforded by the architectural monuments of India.

It is of course a recognised fact that a certain type of the pointed arch was in use in Egypt and in Asia Minor even before the days of Buddhism, and long before the Hegira. But the *mihrāb* of Muhammadan mosques—the niche in the wall of the sanctuary—and all its religious associations from which the structural application of Saracenic arches started, was not in any way connected with this early type.

The permanent mosques of the first Arab disciples of the Prophet, like the churches of the early Christians, were in most cases not buildings specially constructed for their own ritual, but those belonging to rival creeds reconsecrated for the worship of Allah. When the Arabs started on their career of conquest the first objects of their iconoclastic zeal were the temples and monasteries of the hated idolaters—the Buddhist of Western Asia. After smashing the images and breaking as much of their sculptured ornamentation as offended against the injunctions of their law, the buildings with the empty niches—the quondam Buddhist shrines—remaining in their solid walls were often converted into mosques.

The hallowed associations of generations of Buddhist worshippers still clung to these desecrated shrines, and the doctors of Islam found it necessary to explain them in a Muhammadan sense. Hence the *mihrāb*—the niche of the principal image of Buddha—came to indicate the direction of the holy city of Mecca; it was traced in the sand or woven in the prayer-mat as a symbol of the faith. The idea appealed strongly to the Arab race, for every mariner saw the *mihrāb* in the bow of his ship and every desert nomad in the door of his tent. The sentiment of devotion which the image in the niche formerly inspired in the worshipper was thus transferred to the niche itself, and especially to the arch of the niche. The arrangement of niches in Muhammadan houses and palaces was a secular adaptation of the shrines of Buddhist

monasteries. Here, then, was the psychological germ of the pointed style of architecture Saracenic and Gothic—or of the idealism which was the motive force behind it.

All the forms of the pointed arch which characterise Saracenic buildings in the West are found in the niches of the temples of the various Brahmanical sects in India which inherited the early Buddhist traditions. Remove the images and the sculptured ornament of the niches, and you will find the ordinary Arab arch, the stilted arch, the foliated arch, etc. The process of adaptation by which Indian arches were converted into Saracenic, begun by the Arabs in Western Asia in the first centuries after the Hegira, were continued in successive centuries by all the Muhammadan invaders of India—Arab, Afghan, Turk, and Mongol.

The contemptuous name which Arabian histories gave to all the temples of the infidel in India—Boud-*khāna*, or 'Buddha-house'—is one of the many proofs of the early connections of Buddhism with Islam. Buddhist influence penetrated much farther west than the borders of Asia and Europe. Professor Flinders Petrie has found evidence of the presence of Asoka's missionaries at Alexandria; and the resemblance of the so-called horse-shoe arch in Moorish palaces and mosques of the eighth century AD and later to the lotus-leaf arches of the seventh-century Buddhist chapter-house at Ajanta can easily be accounted for by the presence of the Indian craftsmen in Egypt. Seeing that Indian mariners carried on a regular trade with Egypt even before the third century BC, it is reasonable to assume that Indian craftsmen often found their way there in later times. No Western structural process by which this form of arch, derived from bent cane or bamboo, might have been evolved independently is known to archaeologists.

Modern European writers who try to trace the derivation of architectural style entirely from constructive or technical processes would do well to note that the pointed arch in Arab architecture was a purely religious symbol before it became a distinctive structural feature in Saracenic building. The symbolic idea connected with the pointed arch preceded the general use of it as an organic structural feature in place of the round arch and horizontal beam. It appealed to the devout Musulman not because it was architecturally useful and beautiful, but because it symbolised the two fundamental concepts of his faith—God is One, and Muhammad is His Prophet. It was the architectonic symbol of the hands joined in prayer; it pointed the way

to Mecca and to Paradise, and demonstrated mathematically the divine truth that all things converge towards and meet in the One—the inverse of the Hindu proposition. M. Prisse d'Avennes, in his work 'L'Art Arabe', adopts the ingenious theory put forward by M. Salzmann that the different varieties of the Arab dome and the characteristic 'stalactite' pendentives which supported them were originally derived from the form and structure of the water-melon.

He places sections of the latter and details of Arab buildings in Cairo side-by-side to show the striking similarity between them. We can very well admit the similarity without adopting the conclusion which the author derives from it—a conclusion which ignores entirely the religious idealism which lies behind both Saracenic and Hindu art. If the Arab domes and pendentives were derived from naturalistic motifs only we should see the resemblance more marked in the earlier examples than in the later. As a matter of fact there is no such resemblance in any of the earliest existing examples; the illustrations given by M. Prisse d'Avennes are all of late date, and merely indicate that some Arab builders, struck by the similarity between their traditional architectural forms and the structure of the water-melon, made the resemblance more complete. When a Hindu recognised a resemblance between his sacred symbols and any natural forms he dedicated the latter to the deity represented by the symbol. Thus the *bel* tree and many others became sacred to Siva on account of the resemblance between its compound leaves and the three-pronged trident of Mahadeva; but the latter symbol was not derived from the natural forms.

There is nothing to show that the Arabs attached any religious significance to the water-melon, either before or after the time of Muhammad. On the other hand, the pointed arch, or *mihrāb*, was a religious symbol before it was used architecturally by the Arabs. The so-called stalactite pendentive is simply an agglomeration of miniature *mihrāb* niches[2] geometrically arranged to perform the structural purpose for which it was intended. The pointed domes, pendentives, and other characteristic features of pure Saracenic architecture are therefore not to be derived from any natural motifs, but simply from the application of their religious symbolism to all the ancient constructive forms, Roman, Byzantine, Egyptian, Babylonian, Assyrian, Phoenician, Buddhist, and Hindu, used by the builders of the many different races and creeds whom the Arabs employed.

For understanding the development of architecture in different countries it is most important to realise that the conventional nomenclature now given to different styles is apt to be very misleading unless we recognise the very cosmopolitan organisation of the building craft in the Middle Ages as well as in previous periods. No class of society has stood so strongly for religious tolerance and the principle of the universal brotherhood of man as the master-builders, and none have done more for the spread of civilisation, peace, and goodwill among all men. However bitter religious and racial animosities might be, the building fraternity knew none of them. Pagan craftsmen built for Christian, Christian for Musulman, Buddhist for Jain and Hindu, Hindus for every sect. The same rule applied to craftsmen of different races. In times of peace the master-builders wandered far and wide in search of lucrative employment wherever it might be found. In times of war their lives were often the only ones that were spared by the victors in battle or in the sack of cities, for their services were highly valued by all combatants, even by barbarian marauders like the Huns and Mongols. Every new city that was founded or great monument that was built drew to it builders and craftsmen even from far-distant countries. Thus we read of an architect from Ferghana in Central Asia building the Nilometer in Egypt, of Chinese craftsmen assisting in the building of Baghdad, of Indian craftsmen in Japan, and of Persian architects employed in Cairo. If the master-builders of the East had left written records of their travels, we should probably know many Indian Marco Polos who journeyed westwards as well as eastwards when Buddhism was spreading its civilisation all over Asia.

When therefore we speak of Arab architecture and Arab art, it is necessary to remember that few builders and craftsmen were Arab by race; we simply mean the different phases of art and architecture which were evolved in different countries and by different races under the influence of Arab culture. Dr Gustave le Bon distinguishes twelve different styles of Arab architecture, of which the only two which can be considered pure—i.e., not dominated by Byzantine, Romanesque, Persian, or Hindu influence—are an Egyptian style, represented by the series of mosques dating from the tenth to the fifteenth centuries, and a Spanish style, represented by Saracenic buildings in Seville and Grenada. But even in Egypt and Spain, the sources of inspiration of all that is typical of pure Arab art and architecture were in India, Mesopotamia, Persia, and Central Asia.

Though Saracenic and Indian art had this much in common, it is

essential to remember that if India, from the time of Asoka down to the early centuries of the Christian era, had borrowed much artistic material from the countries with which she had had intimate commercial and political relations from time immemorial—Mesopotamia, Persia, and Central Asia—she was at the time of the Muhammadan invasions no longer a borrower, but a lender. Buddhist art had spread all over Western Asia in the previous centuries, and Buddhist–Hindu art was at its zenith when India received the first shock of the Muhammadan invasions. As the armies of Islam, largely recruited from Tartary and Central Asia, came nearer to the northwest frontier of India, Saracenic art came into closer contact with Buddhist–Hindu civilisation and became more and more impregnated with Indian influences, until at last Arab, Persian, and Central Asian art lost their own individual identity as creative forces, and merged themselves into different local phases of Indian art of which the aesthetic basis was essentially Hindu, and only Arab, Mogul, and Muslim in a political, ritualistic, and dogmatic sense.

History was, as usual, repeating itself in this; for exactly similar circumstances had arisen in the early centuries of the Christian era, when the art of Gandhara, from being a provincial phase of Buddhist art with a strongly developed Graeco-Roman dialect, became gradually Indianised and merged itself into the Indian aesthetic synthesis. The Saracenic art which came into India had likewise been Indianised before it crossed the Indus; for it was upon the basis of Buddhist–Hindu civilisation that the two earliest styles of Indo-Muhammadan architecture, which Fergusson calls the 'Ghaznavide' and the 'Pathan', had been built. It was in the Gandhara country that Mahmud of Ghazni and his successors had the centre of their power, and Indian builders were employed in constructing 'the palaces and public buildings, mosques, pavilions, reservoirs, aqueducts, and cisterns' with which Mahmud's capital was adorned 'beyond any city in the East'. The builders were not the fighting Afghans, but descendants of the peaceful Buddhist builders adapting their art structurally as well as decoratively to the needs of a militant instead of a monastic community, and to the symbolism of a monotheistic creed.

The Muhammadan invaders of Hindustan certainly did not have the same opinion with regard to the inferiority of Hindu art and architecture, as compared with their own, which is commonly held by Europeans today. The Arabs, before they came to India as conquerors, had drunk deeply at many sources of Hindu culture; and though they detested Hindu sculpture and painting on religious grounds, they had the highest respect for the skill of Indian architects and artists. Alberuni, the Arab historian who visited India in the beginning of the eleventh century and knowing all the architectural splendour of Baghdad at the height of its glory, before it was laid waste by the Mongols, expressed his astonishment at and admiration for the works of Hindu builders. 'Our people', he said, 'when they see them, wonder at them and are unable to describe them, much less to construct anything like them.'

With this we may compare the admiration of a later Musulman writer, Abul Fazl, Akbar's chronicler, for Hindu painting. 'It passes our conception of things: few indeed in the whole world can compare with them.' Alberuni's contemporary the great Sultan Mahmud of Ghazni, in spite of his detestation of Hindu idolatry, could not refrain from expressing his admiration for Hindu builders. Ferishta tells us that after the sack of Mathura he wrote to the governor of Ghazni extravagantly extolling the magnificence of the buildings and the city. 'There are here', he said, 'a thousand edifices as firm as the faith of the faithful; nor is it likely that this city has attained its present condition but at the expense of many millions of *deenars* nor could such another be constructed under a period of two centuries.'[3] When he returned to Ghazni he brought back 5,300 Hindu captives, doubtless the greater number of them masons and craftsmen, for building the magnificent mosque of marble and granite known by the name of the Celestial Bride, which he caused to be built to commemorate his triumphs. Seeing how great the reputation of Hindu craftsmen was, and since we know that Haroun-al-Rashid renewed the ancient intercourse of Mesopotamia with India and had Indian ambassadors at his court, we may safely assume that Indian builders, artists, and craftsmen were among those of other nations which the great Khalif[a] and his successors employed in the building of Baghdad, just as Timur, the founder of the Mogul dynasty, used them five centuries later in the building of Samarkand.

When the Muhammadan dynasties—Arab, Turk, or Mongol—established themselves firmly in Hindustan, the reversion of what we may call the pure Saracenic or Arabian characteristics to the old Indian or Buddhist–Hindu types becomes more and more evident. The stern simplicity of the Pathan fortress style, which at first sight seems so very un-Indian in conception, gave way to the luxury and elaboration of

Akbar's and Jahangir's palaces. Of the thirteen local divisions of Indo-Muhammadan architecture enumerated by Fergusson, those of Gujarat Gaur, and even that of Jaunpur, in spite of its pointed arches, are so conspicuously Hindu in general conception and in detail that it is evident at first glance that the builders and craftsmen must have been almost entirely Indian, and probably many of them Hindus. The Jami' Masjid and other mosques of Ahmadabad are, as Fergusson says, 'Hindu or Jain in every detail', only here and there an arch is inserted, not because it is 'wanted constructively, but because it was a symbol of the faith'. At first sight the essential Indianness of the remaining Indo-Muhammadan styles, as classified by Fergusson, is not so apparent. In two of the most important, namely the Mogul and Bijapur styles, Fergusson and all other writers have ignored the Hindu element entirely and treated them both as foreign to India. Here, I think, they are as mistaken as the archaeological experts who have attributed the inspiration of Indian sculpture to the Graeco-Roman craftsmen of Gandhara. It is Indian art, not Arab, Persian, or European, that we must study to find whence came the inspiration of the Taj Mahall and great monuments of Bijapur. They are more Indian than St. Paul's Cathedral and Westminster Abbey are English.

Notes and References

1. *History of Indian Architecture*, vol. II, p. 288 (1910 edn).
2. The structure of the stalactite pendentives was in all probability derived from the use of semi-cylindrical tiles, set in mortar, in place of brick corbelling or arches, for the support of light domes.
3. Ferishta, *T'arikh-i Firishta*, H.M. Elliot and J. Dowson, *A History of India as Told by Its Own Historians*, Calcutta, 1877, vol. I, p. 59.

CHAPTER I.4

An Historical Memoir on the Qutb: Delhi*

J.A. PAGE



Among the many historical remains at Delhi,[1] the most notable both in point of antiquity and arresting design is the Qutb—a name given to the group of monuments embracing the Quwwatu-l-Islam Mosque of Qutbu-d-din Aibak and its great Minar, which stands out as a landmark for miles around. Included in the group are the tomb of Altamish [Iltutmish], the *Madrassa* [*madrasa*], and what is believed to be the tomb of Alau-d-din Khalji. These three monarchs were, in turn, responsible for the construction of the original fabric of this, the earliest mosque extant in India, and for its subsequent additions and extensions.

The Mosque, built, it is said,[2] upon the site of a demolished Hindu temple and constructed piecemeal with materials taken from twenty-seven others,[3] was erected as a monument to the 'Might of Islam' (Quwwatu-l-Islam) by Qutbu-d-din Aibak, slave, army commander, and Viceroy of Muizzu-d-din[4] Muhammad Ghori ibn Sam, King of Ghazni, to celebrate his decisive victory over the Rajput forces of the Chohan [Chauhan] chief, Prithvi Raj, in 1192[5], on the field of Tarain; and the Minar,[6] commenced by this same conqueror as an adjunct to the mosque, combined the purposes of a tower of victory and a *mazinah*,[7] from which to sound the *azam* (call to prayer)—a monument to overawe

*First published as chapter I.2 (pp. 6–26) in *Memoirs of the Archaeological Survey of India*, no. 22 (Calcutta: Government of India, Central Publication Branch, 1926).

the spirit of the vanquished 'infidel' peoples, and sustain the courage of the 'faithful' exiled from their distant Afghan hills.

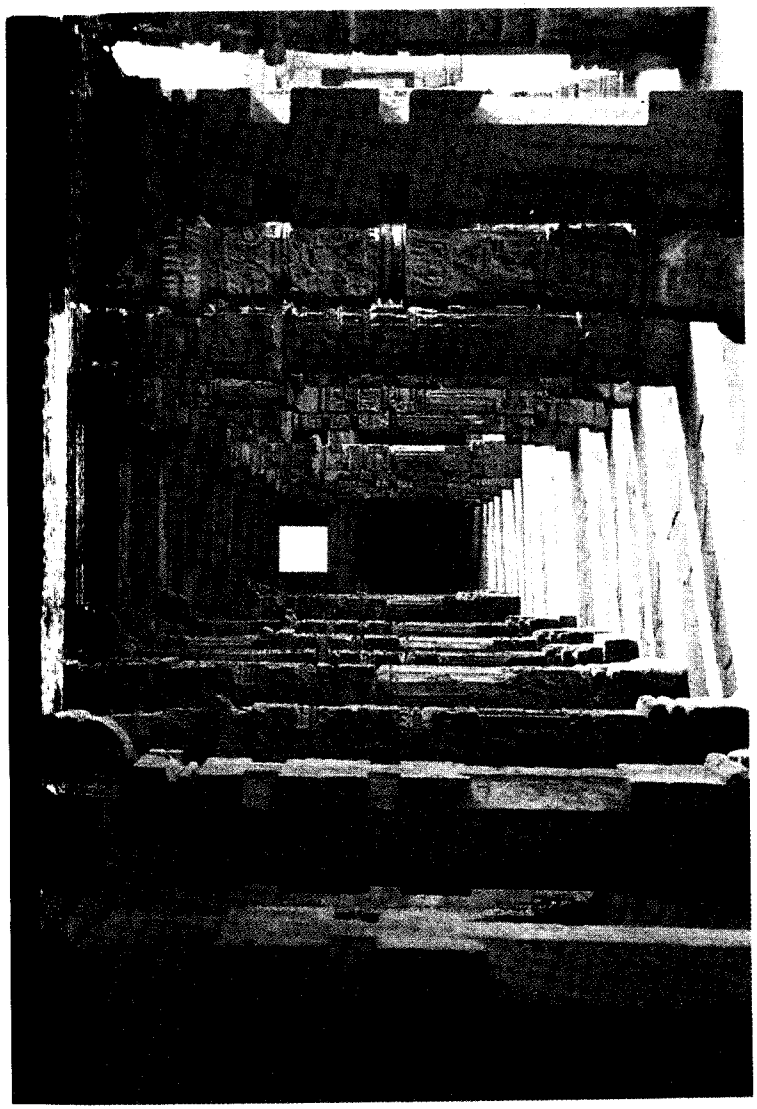
With regard to the founding of the original mosque, the internal evidence[8] existing appears to indicate that, besides being located on the site of a demolished Hindu temple, the mosque embodied in itself a definite portion of that structure, up to the plinth level. The extent of this problematical temple plinth appears to coincide with that half of the mosque quadrangle west of the north and south gateways.

Built in the shape of a simple rectangle enclosing a central quadrangular court, the mosque measures some 214 feet by 149 feet externally.[9] The prayer chamber on the west is four bays in depth; the colonnade on the east, of three bays, being deeper by one bay than those along the remaining two sides. Centrally, in the three colonnaded sides, occur entrances, a shallow porch to the north and a deeper one to the east and south descending by a flight of steps to the level of the ground outside. Over the north and east gates are inscribed lintels recording in *Naskh* characters the circumstances attending the erection of the mosque. In the four corners of the mosque secluded accommodation for the *zenana* was provided by means of little entresol apartments[10] reached by narrow staircases in the thickness of the enclosing wall.

In the prayer chamber proper, the roof extended at one level over the greater part of the *liwan*, as is apparent from the positions of fragmentary roofing slabs and lintels still remaining in the back-face of the great arched screen; while the tall column shafts still standing at the north end of this chamber afford clear indications that the level of the roof here was raised some four feet above that of the adjoining *zenana* chamber which, in its turn, overtops the roof of the contiguous colonnades to the east.

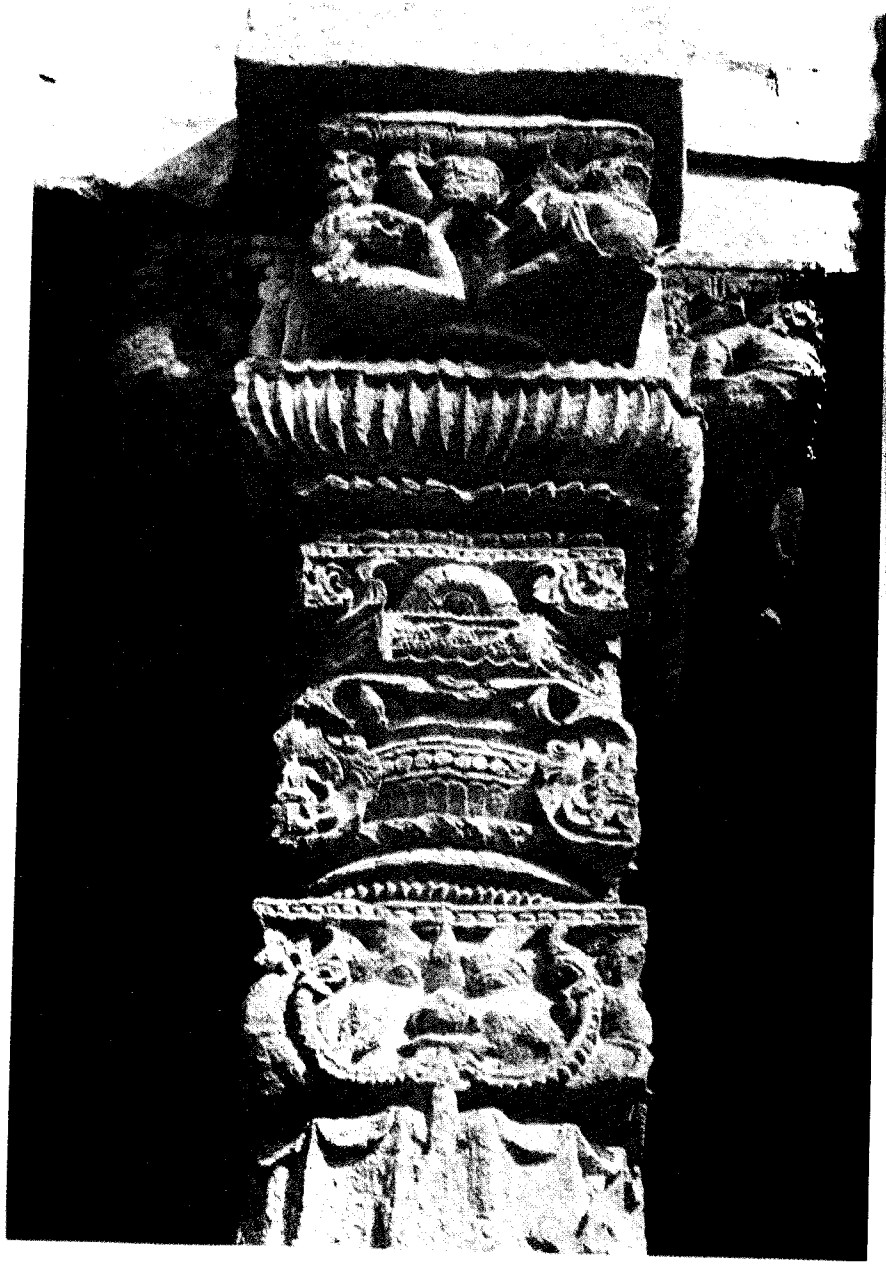
Corbelled capitals with five-fold projections surmounting certain of the columns of the prayer-chamber furnish evidence of previously existing lintels arranged to form an octagon in support of the domes and give a definite clue to the arrangement of the columns beneath them. The positions of the *mihrāb*-recesses in the west wall further assist in the visualisation of the original arrangement of the fallen interior, the bays of which would naturally be set out in symmetry with them, and not with the openings of the great arched screen, which, erected as an afterthought when the *liwan* had been completed, conforms neither with the column spacing nor with the *mihrāb*-recesses behind it.

This arrangement may be taken as being fairly authenticated by the



All photos courtesy Archaeological Survey of India

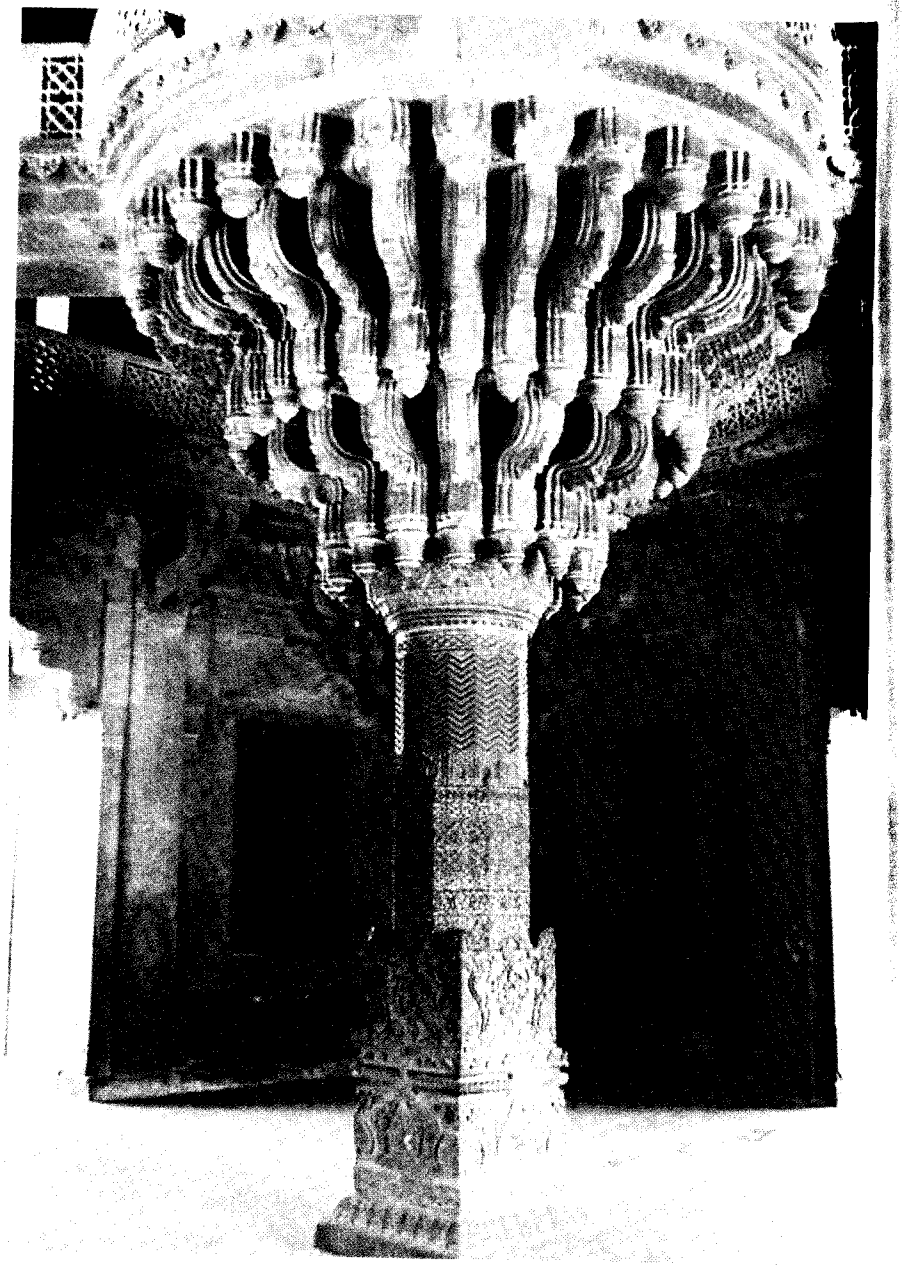
1. Masjid-i-jama, Delhi, 12th-13th century, pillars in the riwaq (Photo M. Juneja)



2. Masjid-i-jama, Delhi, 12th-13th century, riwaq pillar (Photo M. Juneja)



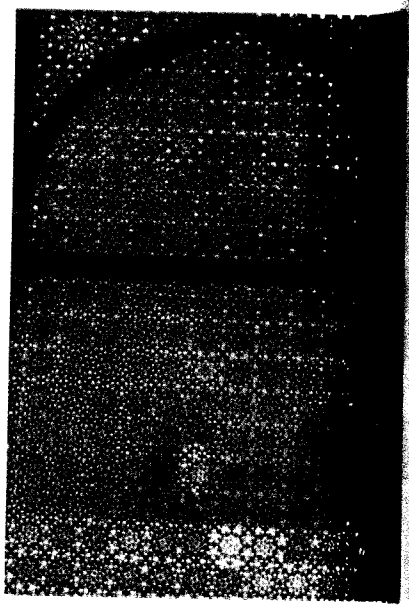
Madinaal-Azahra, Cordoba, Spain, early 10th century, remains of the palace built by Abdal Rahman, caliph of Cordoba; horseshoe arches in portal (Photo M. Juneja)



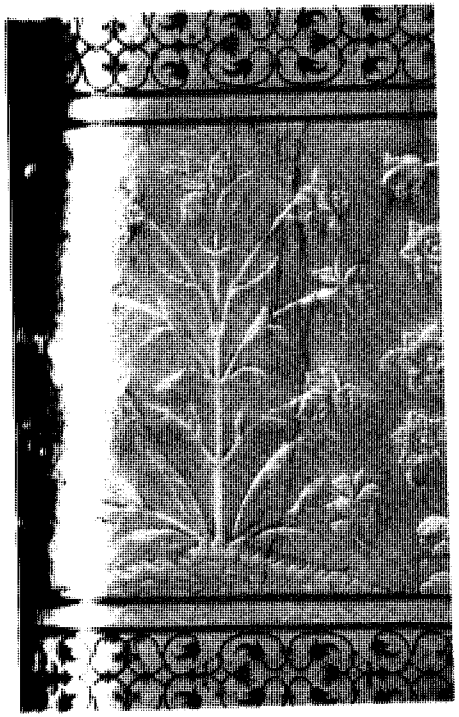
4. Diwan-i Khas, Fatehpur Sikri, 16th century, central pillar (Photo F. Huneke)



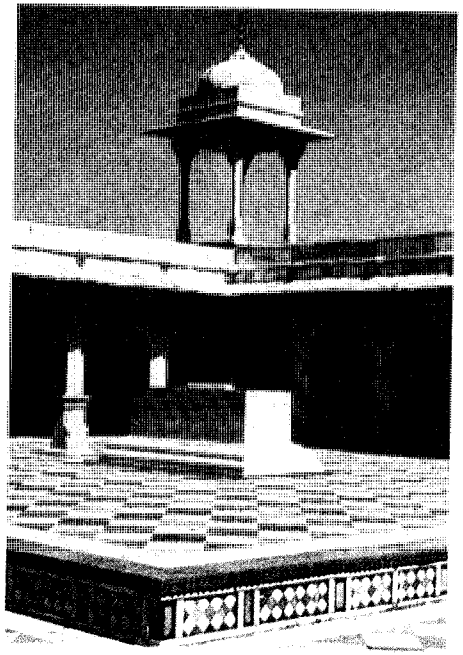
5. Masjid complex, Fatehpur Sikri (Photo F. Huneke)



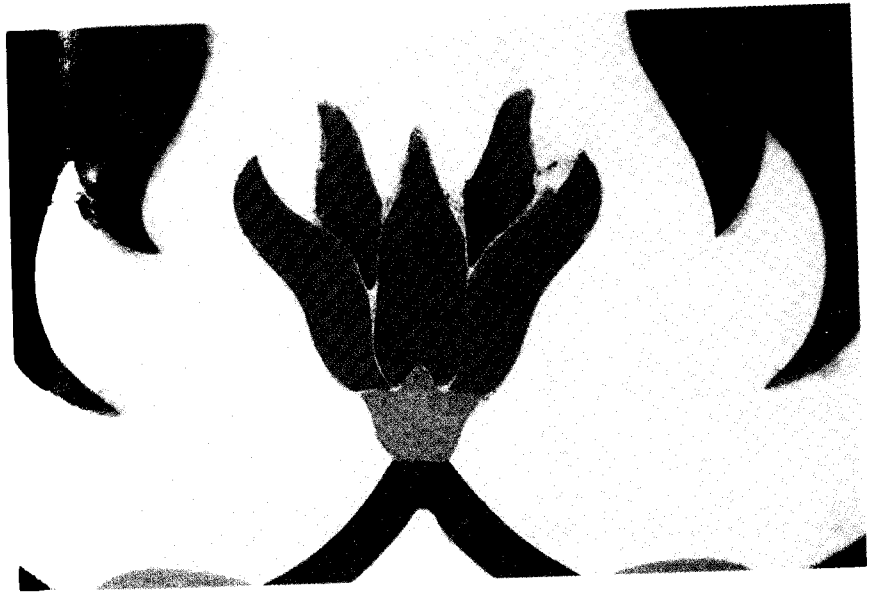
6. Tomb of Salim Chishti, Fatehpur Sikri jali (Photo F. Huneke)



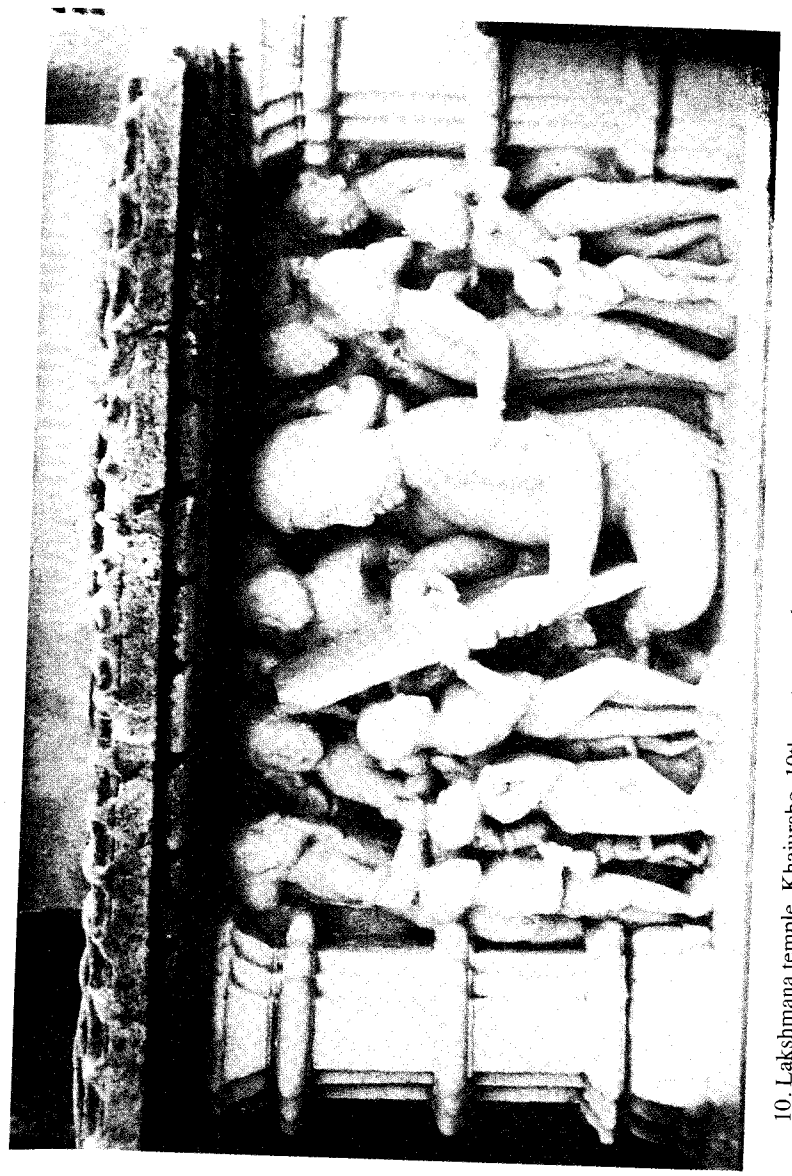
8. Taj Mahal, Agra, 17th century, detail of high relief carving on mausoleum facade (Photo F. Huneke)



7. Mausoleum of Akbar, 17th century, Sikandra, upper storey with cenotaph and chiragdann (Photo F. Huneke)



9. Taj Mahal, Agra, 17th century, detail of pietra dura on mausoleum facade (Photo F. Huneke)



10. Lakshmana temple, Khajuraho, 10th century, sculpted frieze showing a shapari [illegible] disciples / Photo F. Hinzelin

[illegible] internal evidence on the site, as revealed by a careful scrutiny [illegible] remains.

[illegible] point of particular interest in this original portion of the structure [illegible] ingenuity with which the despoiled Hindu materials were reas[illegible]bled by Hindu artisans to meet the demands of their Muhammadan [illegible]. Columns of diverse designs and different temples were ranged [illegible] sometimes set one upon another, in continuous rows to sup[illegible] a roof constructed, in its turn, of the flat-ceiled slabs and shallow [illegible]fled domes taken bodily from some wrecked Hindu shrine. [illegible]dptured figures, profane in the eyes of the iconoclast Muslim, were [illegible]ously mutilated and hidden from sight by a covering of plaster; [illegible]times built face inwards into the wall and the back inscribed with [illegible] from the Holy Quran.

[illegible] Sivaite, Vaishnavite, Jaina images[11] appear in a profusion elo[illegible]ent of the thorough and impartial destruction of their 'infidel' shrines, [illegible] of the genius for adaptation their desecrators exhibited in utilising [illegible] despoiled materials for their own purposes. All is improvised: no [illegible]ele feature but has been adapted and used second-hand.

Ornament of unoffending geometrical pattern was utilised when [illegible]forthcoming from among the temple stones; and when it came to the [illegible]building of the great frontal screen, the Hindu craftsman was set to [illegible]ork upon alien arabesque designs and strange *Naskh* characters that [illegible]must be woven in among his own sinuous patterns to frame a pointed [illegible]rch – a feature again foreign to the whole tradition of trabeate Hindu [illegible]construction.[12] How essentially 'Hindu' in feeling are the elements of [illegible]the ornamental reliefs is apparent when one compares the illustration [illegible]of the carved bands on the original portion of the great screen of the Qutb mosque with that of the more characteristically 'Saracenic' patterns ornamenting the subsequent extension of the same screen by the emperor Altamish when Muhammadan architectural forms and traditions had become more established in Hindustan.

This screen, erected by Aibak in AD 1199,[13] is perhaps the most interesting feature of the mosque. As already noted, the bands of sinuous carving are, as regards their technique, wholly uninfluenced by Saracenic ideas. Their serpentine tendrils and undulating leaves are the work of the Hindu, who had developed these identical forms in his temples through generations of usage. The disposition of these foliated bands in the design of the façade is, on the other hand, characteristically Saracenic in motif, and reveals at once the relation between the Muhammadan

constructor directing affairs and the Hindu artisan, on whose interpretation of his ideas he was dependent for the carrying out of his designs. The result is happy enough: the intricately carved surface gives a 'texture' to the massive screen, and in the variations of the patterns and bands serves as an effective relief to the broad flat surfaces.

The iron pillar set up in the inner court axial with the main central arch of the screen is an interesting feature as affording evidence of the capacity of Hindu civilisation in the fourth century AD to weld malleable iron[14] on so ambitious a scale.

The pillar would appear to have been erected originally as a standard to support an image of Garuda, the vehicle of Vishnu, in front of a temple dedicated to that deity. The fluted 'bell' capital with its *amalaka* members is a characteristic feature of the Gupta architecture of northern India, and affords a clue to the period of its erection; and his evidence is substantial by the Sanskrit inscription in Gupta characters of the fourth century AD engraved on the pillar, recording its erection by a king named Chandra, a devotee of the god Vishnu, as a 'lofty standard' of that divinity on 'the Hill of Vishnupada'.

The probabilities are that the pillar was set up in its present position by the Muhammadans, who prized it as a curious relic; the fact of the rough uneven surface near the base now exposed above ground seeming to indicate fairly conclusively that the intention was that this portion of the pillar should be buried in the ground in the original site. (*cf.* The similar feature of the Asoka *lat* at Kotla Firoz Shahi, Delhi.) Where this original site was there is no sufficient evidence to indicate.

So much for the mosque proper of Qutbu-d-din Aibak, before the advent of Altamish and Alau-d-din Khalji.

Shamsu-d-din Altamish, Turk of Albari [Ilbari], and slave successor of his slave master to the Muhammadan throne of Delhi, was not content to leave this monument to invading Islam unmarked by any attention but would add to its scale and dignity as a work of religious grace.

A wing was projected to the north and south, and the enclosure extended to the east, impinging on the great minar southwest of Aibak's mosque. Outer entrances in each of these three sides were made axial with those of the original mosque, and the great screen was extended north and south in continuation of Qutbu-d-din's.

It is easy to discern in the symmetry that characterises the interior arrangement of the columns of Altamish's northern prayer chamber that *mihrāb*s, columnar bays, and the spans of the arched openings

of the great frontal screen were, from the first, conceived as a single harmonious design, in contrast to the fortuitous arrangement of these features in Aibak's original mosque. The high double-storeyed central bay with its surmounting dome, is a conjectural feature, and relies for its authenticity on the existence, in the rear face of the great screen, of double corbels at the arch-springing, and the fragmentary remains of vaulting and roofing slabs projecting at a lower level. These indications seem to assume that the double-storeyed arrangement so common in the fifteenth century *Ahmadshahi* architecture of Gujarat was anticipated by Altamish in his extension of this first mosque to be built by the Muhammadan conquerors of India. If this upper-domed storey did originally exist and there is no evidence available on the site precluding the possibility), it must have formed a very prominent feature of the design, and, as the upper intercolumniations doubtless were, with screens of geometrical *jali* to exclude the weather.[15]

Of Altamish's colonnades little now remains; but it is apparent that the supply of elaborately carved Hindu columns had given out, and that he was reduced to the relatively plain shafts and capitals that compose them. The feature of real interest is his extension of the great screen.[16]

Conformable in general design with the existing screen of Qutbu-d-din, Altamish's extension betrays a considerable advance in the adoption of Muhammadan forms of surface decoration. The arabesque patterns[17] are purely Saracenic, their distinctive character being common to Saracenic architecture from India west to Spain.

The Arabic lettering, too, has advanced beyond the simple unelaborated shapes wrought by the 'prentice' hand of the Hindu, and is evidently the work of a craftsman more familiar with the characters he is carving. A comparison may be made in which the differences between the two types are revealed. Here, too, we see introduced a combination of the square *Kufic* and the elaborate and intricately interwoven *Tughra* characters.

The attached *mutakha*-columns[18] set in the recessed angles of the piers jambs are another feature of Altamish's screen extension that appears in Indo-Saracenic architecture for the first time, and that continues as a decorative feature almost uninterruptedly throughout the Pathan period, and afterwards in Mughal architecture.

The similarity of the disposition of the arched openings in the naves of this mosque with those in certain of the bays of the Sassanid bridge of Dizful in Persia (fifth century AD) is also very noteworthy. The pointed arches of this mosque, those of Haruna-Rashid's ruined palace

at Rakka in Syria (AD 790), and those again of the mosque of Amr (AD 692) in Cairo are probably the earliest instances of this feature existing in Saracenic architectural examples; and the source of the typical (even 'hallowed') Saracenic form is probably to be found in Sassanid prototypes, of which an example occurs in this same bridge of Dizful.

As to the warrant for assigning to the pointed arches of the bridge at Dizful (more accurately at Shushter) a Sassanian origin, it should however, be remarked that Lord Curzon in his *Persia and the Persian Question* (vol. 2, pp. 374–5) states that 'the bridge has evidently been built and rebuilt scores of times, as may be seen from the differing character of the material and the different style and size of the arches', that 'the oldest bridge was destroyed by Hejaz ibn Yusuf during the reign of Abdul Malik-ibn Mervan (AD 684–705)'; and that 'the dam is said to have been repaired by Timur in AD 1393'. Thus, in the absence of an examination of such evidence as may still exist in the structure itself, the question of the origin of its pointed arches must remain an open one.

In commenting upon the origin of the pointed arch Signor Rivoira (in his *Moslem Architecture*, trans. C. McN. Rushfort, Oxford, 1918, pp. 148–53) states in a somewhat casual way that this is to be sought in India, and instances examples of the Buddhist *chaitya* form as portrayed in the Gandhara period (second-sixth century AD) and later in the rock cut Rathas of southern India; though it may be remarked that this writer makes no attempt to establish any definite connection between such instances and the early Saracenic pointed arch-forms of Arabia and Egypt.

My own feeling in this regard is that the origin of this characteristic form of Saracenic architecture is, as M. Saladin suggests (*Manuel d'art Musulman*, 1, 23–4), rather to be found in the traditional form of portable tent used to this day by the nomad Arabs on the Euphrates, which consists of a detachable framework of curved supports meeting at the apex and covered with cloths, the curved shape of which, as he remarks, is that of the earlier Chaldean and Sassanid arch.

In this connection, the pointed arch-form of the dome-shaped Turkoman tent covered with cloths that he [Saladin] illustrates (page 17 ibid.) is specially interesting, the more so when one perceives the significant similarity between the intersecting strips of tape stretched as a 'chord' over the curved surface of the dome to secure the cloth coverings in position and the almost identical treatment of the 'honeycombing' set-out decorating the interior of the later Saracenic domes.

Signor Rivoira's allusion to the Palace of Chosroes at Ctesiphon as an early example of the use of the simple pointed arch in Western Asia' is curiously in error. The arch-form here is certainly not pointed in shape but approximates more to a parabola—*en chainette* as M. Choisy designates this form (*L'art de batir chez les Egyptiens*).

M. Saladin (*Manuel d'art Musulman*, vol. 1) regarding the evolution of this early arch-form states: 'Cette courbure des voûtes a dû être inspirée aux premiers constructeurs chaldéens par la forme des berceaux de branchages qu'élevaient les riverains de l' Euphrate à cette époque, comme ils le font encore aujourd'hui . . . Sur ces cintres en branchages, on a dû, dès l'origine, appliquer de la terre battue avec des roseaux, afin de former un revêtement plus solid et plus impénétrable aux rayons du soleil que ne l'étaient primitivement les étoffes ou des peaux tendues. Il est probable que l'habitude de voir aux arcs de ces cabanes une forme elliptique conduisit à la conserver lorsqu'on appareilla des voûtes en briques.'

The typical *chaitya* form of horse-shoe arch as portrayed at Nasik, Ajanta, Karle and elsewhere in India also undoubtedly originated in a primitive construction of bamboo members shaped to a semicircular curve and held together at the foot by connecting ties, the whole then being encased with a mud plaster. The structural *chaitya* of brick discovered by Mr Cousens at Ter in the Naldrug district of Hyderabad in 1901, and the other similar example at Chezarla in the Kistna district of the Madras Presidency found a few years previously, are but a development of this primitive wooden construction; but that the Indian examples of this arch-form influenced or reacted in any way upon the Saracenic examples there is no definite evidence available to prove. Rather it would seem that each developed separately and independently on its own lines from the accidental coincidence of a common construction prototype.

It is interesting to note that the adoption of the pointed arch in the Gothic architecture of twelfth century Europe was an indigenous solution of the geometrical difficulty of negotiating the vaulted intersections of an oblong chamber; though it is possible that the germ of the idea came through contact with the East, as a result perhaps of the Crusades.

Altamish's arches in the great screen, while maintaining the same pointed form, differ in contour, it is curious to note, from those of Aibak; the piquant little counter-curve at the apex, with its slight suggestion of 'ogee', being missing from the former, though it appears again in Altamish's tomb (infra).

A further difference in his treatment of the screen extension is

noticeable in the absence of the subsidiary upper arched openings above the lower side arches flanking the central archway of the original screen. Though the upper parts of both Altamish's and Aibak's screens are now largely missing, this difference in treatment is apparent in the existence of dressed ashlar jambs.

With Altamish's erections at the Qutb must be mentioned his tomb[19] situated immediately west of his own northern extension of the mosque. The tomb takes the form of a simple square chamber, and was covered originally by a circular dome, carried on a form of squinch-arch[20] which serves to negotiate the difference in shape between the square plan below and the circle above.[21]

Here again is seen a surface decoration of a predominantly Saracenic type, but little influenced by definitely Hindu forms, though these latter occur promiscuously in the interior as isolated features in one or two bands of carving below the arch tympana, in a moulded string-course of the pendentive recesses and again forming the pendant 'drops' of the block-corbels in the angles of the octagonal dome-drum.

Practically the whole interior surface, both walls and roof (with the exception of the lower walls on all but the west side, which were probably plastered), is intricately banded with a diaper of arabesque designs, elaborated with Quranic inscriptions in both *Naskh* and combined *Kufic* and *Tughra* characters which frame the arched openings and recesses and form a frieze to the walls. Marble is introduced only in the central *mihrāb* and in the cenotaph[22] in the middle of the tomb chamber; the flanking *mihrāb*-recesses in the west wall, which are of similar design, being of red sandstone, with which material most of the interior is faced. The attached angle-*mutakhas* that form a distinctive feature of Altamish's extension of the great screen of the mosque appear similarly in the jambs of the doorways and *mihrāb*-recesses and beneath the octagonal dome-drum of his tomb. The exterior of the tomb is very simple. A sparsely banded treatment in grey quartzite stone, similar to that of the gates of the mosque, appears in the plain ashlar-dressed external walls, and contrasts with the central bays of red sandstone, on which a decoration of purely Saracenic arabesques and Arabic inscriptions is concentrated. It is curious that none of the inscriptions on the tomb contains any historical record, the writings being exclusively extracts from the Quran.

After Altamish—and an interval of some ninety years—comes the Afghan, Alau-d-din Khalji, whose ambitious schemes for still further extension failed of accomplishment before his death in AD 1315, and

[illegible] then abandoned. His extensions were made to the north and east, [illegible] limits of Altamish's southern alignment being maintained. Alau-d-[illegible] erections, again, were marked by a symmetry that seems to have been instinctive in the Saracenic architect, and his gateways to north and east were set in precise alignment with those of his two predecessors; the Alai Darwaza to the south having, however, necessarily to be placed to one side of Altamish's existing gate.

The gateway is the most noteworthy feature of Alau-d-din's addition. Built of finely worked red sandstone, with an external relief of marble disposed in incised bands and panels, it is of exceptional merit architecturally. Its excellent proportions and simple composition, with pierced central openings echoing the contour of the covering dome, must be seen at dusk silhouetted against an evening afterglow to be fully appreciated, though the loss of most of the upper wall-facing and the original parapet is necessarily a detraction.

The present square outline of the parapet of the façades is almost certainly an innovation on the part of Major Smith, who carried out extensive repairs to the gateway in AD 1828. As is very clearly apparent in the treatment of the red-stone facing and the marble dressings that still remain intact, the façade in the original design rose higher in the centre than at the sides, and the prominent marble string-course, which marks the difference in treatment between the upper and lower portions of the flanking bays, was carried up and round the central archway. Evidence that these flanking bays were lower is furnished in the return angles of the upper marble panels that are still preserved; for the margin at their sides would be carried round along their top of equal width to complete the 'return' [. . .].

The interior proportions of the gateway are again most pleasing; while the recessed corner arches of attractive 'horse-shoe' form carrying a plain spherical dome over the square chamber are an especially happy solution of the universal constructional difficulty.

The development of Saracenic ornament attained in Alau-d-din's period is clearly revealed to us in the arabesque decoration of this south gateway. The broad, flat, diapered surfaces of the red-stone jambs are essentially Saracenic in feeling, and contrast curiously with the more indigenous ornamentation of sinuous tendrils and rounded lotus buds that frames the inscribed pilaster panels between the smaller openings; while the projecting marble plinth moulding might well have been brought direct from some Hindu shrine.[23]

The inscriptions framing the archways on the west, south, and east

fronts of the gate record the name and titles of 'Abul Muzaffar Muhammad Shah (Alau-d-din Khilji), the Sultan', and his erection (actually extension) of the mosque in the year AD 1311.

The junction of Alau-d-din's masonry with that of Altamish just west of the former's red-stone gateway is very clearly marked as in the slight divergence of his treatment of the window openings with their red-stone *jali* screens.

Only a short length of Alau-d-din's enclosing colonnades connecting his southern gateway with the southeast corner of his extension is now extant. The remaining portions have been represented on the site by a continuous screen of shrubberies along the east and north fronts. From his intended northern colonnade, towards its west end, project the recently excavated foundations of a large gateway set in alignment with the corresponding north gates of his predecessors.

Of Alau-d-din's eastern gate, represented by the gap in the shrubbery through which the visitor enters the quadrangular enclosure on leaving his conveyance, no vestige now remains; but that there existed such a feature here is indubitable. This emperor's projected northern extension of the great arched screen, again, is only traceable in the low masses of masonry core which are all that now exists of his unfinished arch-piers.

Ambitious in his architectural, as in his political designs, Alau-d-din aimed in his projected extensions at completely dwarfing the efforts of his predecessors, and his great arched screen was designed to extend as far again as theirs combined, and be of twice the scale. His projected minar, conceived on a scale that should double the proportions of the existing minar,[24] never rose above the first stage, and his whole scheme was abandoned at his death. Though it comprises only the original core of the structure, and that in a dilapidated condition, it is nevertheless possible to recognise several distinctive features that this great minar was intended to exhibit. The curious treatment of angular fluting, which may be likened in section to the outline of a flattened letter 'M' separated by deep canellures, is very distinct, as also is the treatment of shallow curved recesses still apparent in the rough core of the double base: while the whole minar was evidently intended to be based on a high wide *chabutra*. Inside the minar it is very clear from the relative heights of the encircling windows which pierce the walls at every quadrant that the means of ascent has to be a very gradual ramp, and not a stair as in the smaller minar of Aibak and Altamish. Entered upon through a doorway on the east, the ramp would follow the inclination of these windows and ascend the minar in a direction from right to left.

It may be of interest to set out here the several items of evidence, visible or deducible, by which it was possible to build up (with some confidence as to its probable authenticity) the conjectural restoration of Alau-d-din's great screen of Alau-d-din with no other material, at first glance, than that provided by the low fragmentary masses of masonry which represent all that is now left of this structure. In the first place, the size and relative spacing of these fragmentary piers, to which portions of the original ashlar facing still adhere, give a definite indication of the elevational treatment of the screen as regards mass and void; the proportion of the openings as to height being copied from those of the earlier screens which the extension was to augment.

Thus the first arched opening (at the south end) is found to correspond approximately in size with the side arches of Altamish's contiguous screen, the next one, of greater span, necessarily rising higher in the same proportion; and the third opening, repeating the first, results in an approximate duplicate of the detached extension of Altamish. The greater height, as compared with this latter, of the flanking portion of Alau-d-dins's screen results from the wider piers at the extreme ends of the façade, the decorative motif of the earlier screens, with its band-and-architrave treatment framing the arch and returning along the top of the screen, being repeated in his design. The rise in the height of the centre bay of this flanking portion of Alau-d-din's screen is occasioned by the greater height of the arched opening it contains.

Indubitable evidence of the high dominating central façade of the Alau-d-din screen is to be found in the greatly increased thickness and bulk of the remains of the piers composing it, which break forward beyond the normal line of frontage. Relative widths of openings contained must reveal again the approximate heights of its arches proportioned on those existing; and the treatment of the wings with their higher centre bays affords a clear indication of the design intended for the central portion of the screen, and predicates the rise of its centre bay. The small side openings of this prominent central façade, rising (according to their relative proportions) to but approximately half the height of the great centre archway, leave room above them for a repetition of the smaller subsidiary arched openings that were a feature of Qutbu-d-din Aibak's original screen; and thus the motif of the whole extension proposed by Alau-d-din but repeats in a general way (and logically enough) the treatment he found already existing in the combined screens of his two predecessors.

With regard to the architectural arrangement of the interior of Alau-d-din's prayer-chamber, the position of the openings in this frontal

screen again furnishes a reliable clue to the probable spacing of the columns, and seems to indicate very clearly that the interior design of his predecessors' prayer-chambers was again called upon to furnish the model for his own.

Altamish's architectural expedient of increasing the ceiling height of the centre bay of his prayer-chamber (of which definite indications exist in the remains of roofing slabs in the back-face of his screen) would doubtless also have been further exploited by Alau-d-din, whose greatly dominating central screen archway called for a correspondingly greater increase in the height of the chamber behind it.

Alau-d-din's college (*madrassa*),[25] lying immediately to the south-west of the mosque, is now in a very ruinous condition, but it is possible to visualise from a study of its fragmentary remains the appearance of the structure in the days of its founder. The College is built around a simple quadrangular court entered on the north side through a triple gateway of some size, the centre bay of which projects somewhat beyond those flanking it.

On the south side of the court is located a large square structure covered originally by a dome, now fallen, which is believed to be the tomb of the Sultan Alau-d-din. It was marked originally by a boldly projecting portico, of which remains still exist. Flanking this tomb chamber are two smaller chambers oblong in plan, which are separated from the centre tomb by narrow passageways. In the centre and western chambers were disclosed on excavation what appeared to be indications of a grave. The three buildings at this end of the court are contained in a common walled enclosure, skew-planned on the south side, which leaves a clear passage permitting of circumambulation about them, except in the case of the eastern chamber of the three where the passage is omitted on the east side and the wall contains an ascending staircase leading to the roof.

The east side of the main quadrangular court was bounded by a simple screen wall from which projects a single chamber, the dome of which, raised on a prominent drum or necking, was repeated symmetrically on the opposite side of the court.

Along this western side is a series of small cell-like apartments, a distinctive feature of which is the method employed of supporting the flat-ceiled roof—a curious combination of Hindu and Saracenic devices. Thus, the centre part of the roof is carried on a wide deep-soffited pointed arch running axially north to south which, in turn, is made to carry the ends of flat roofing slabs laid to form a simple diagonal coffer

characteristic of the ceiling construction of the aisles of a temple *mandapa*.[26]

Another noteworthy feature of these *madrassa* cells is the use of what for the want of a better term may be called a corbelled pendentive in the corners of the two higher domed chambers that break the skyline towards the ends of the façade. It is the earliest instance of the corbelled treatment of a pendentive in India (*c.* AD 1290), and is by no means an unhappy solution of this constructional problem.[27]

It is a singularly fortunate circumstance that provides us with an almost complete history of the Minar from the commencement of its building in AD 1199 to its repair in Sikandar Lodi's reign (AD 1503) in the inscriptions it bears,[28] though the ill-advised, if well-intended activities of later restorers have left their mark upon them, and have resulted in rendering the earliest ones very largely unintelligible.

Thus we learn (or are able reasonably to infer) that the Minar was commenced by the 'Amir, the Commander of the Army, the Glorious, the Great',[29] of the Sultan Muizzu-d-din Muhammad Ghori, who carried it (probably) up to the first storey,[30] when the advent of Altamish[31] upon the scene resulted in three further storeys being superimposed upon it, and the Minar carried to completion.[32] Alau-d-din seemingly had no hand in its erection,[33] being intent on outrivalling it in its imposing height by a still more pretentious minar of his own.

The fifth and final storey, and probably most of the fourth, owe their existence to Firozshah Tughlaq, who 'repaired the minar of Sultan Muizzu-d-din (Muhammad Ghori), which had been struck by lightning, and raised it higher than before'.[34] From this quotation, and from the very noticeable reduction in the relative height of these last two stages compared to the three lower ones, not to mention the marked change in architectural style,[35] it seems practically certain that these two upper storeys of Firozshah have replaced a single and more happily proportioned stage that originally crowned the minar of Altamish.[36]

The last of these earlier recorded repairs is referred to in the inscribed frieze of the entrance doorway at the foot of the Minar, where we learn that 'the Minar of His Majesty . . . Shamsu-d-din . . . in the reign of Sikandar Shah (Lodi) . . . was repaired . . . in the year 909 H (AD 1503).'

While on the subject of the repairs executed to the Minar, it will be convenient to record the attentions of later restorers to which the structure has been subjected within the last 120 years. 'On the 1st of August 1803 the old cupola of the Qutb Minar was thrown down and the

whole pillar seriously injured by an earthquake.'[37] About two years after, the Governor-General authorised the necessary repairs to be begun, and the work was entrusted to Major Robert Smith of the Engineers, who completed it by the beginning of the year AD 1828, at a cost of Rs 17,000. All the forms of the mouldings were carefully preserved, but the rich ornamentation omitted (quite rightly, from an archaeological standpoint, be it said).

As General Cunningham observes,[38] this part of the work appears to have been done with much patience and skill, and reflects great credit on Major Smith as a conservator of ancient monuments. The General's castigation of the 'restoration' performed by Major Smith upon the entrance gateway and his inference from the latter's report[39] 'that the whole of the entrance doorway is Smith's own design, a conclusion which has already been drawn by Mr Fergusson, who denounces the work as being in the true style of Strawberry Hill Gothic' are, however, very much besides the mark, as both Cunningham and Fergusson would have realised had they been acquainted with the existence in Cairo of *kanguras*, of the same somewhat unusual stepped shape as crown this doorway, at the tomb of the Sultan Kalaun (dated AD 1284),[40] and again at the mosque of Al-Azhar there, which feature M. Saladin would date from the year AD 1208.[41] The strictures applied to this gateway are all the more remarkable in view of the fact that the same original *kanguras* (in which the 'Strawberry Hill' allusion centres) exist again on the second storey opening of the Qutb Minar itself, which should have been apparent to their critics. One of the inscribed slabs over the entrance doorway has, it is true, been replaced in its wrong order by the restorer, but, as is apparent through a close scrutiny of the work, all the masonry above the architrave: *kanguras*, cornice, inscribed frieze, and flat architrave alike (with the exception of the centre stone of the last, and a plain narrow band immediately beneath the frieze) is patently composed of the old original weather-worn stones. The actual new work is readily distinguishable and is confined to the masonry below the architrave. It certainly is open to stringent criticism, as are, indeed, the 'Gothic' balcony railings, and the irritating 'Bengali' *chattri*, now happily deposed. But I think it due alike to the repairer and to the modern student of Indo-Saracenic architecture to expose the fallacy of the criticism levelled at this doorway, which, originating in the authoritative dictum of Fergusson, has obtained currency for the last fifty years.

The two separate minars believed still to be standing in Ghazni provide us at once with both the immediate prototype of the Qutb Minar and an early instance of the custom among the Muhammadans of erecting such columns in the embellishment of their cities. The ultimate origin of these towers is probably to be found in such Sassanian structures as the towers of Jur and Firozabad[42] in Persia, the Chaldean *ziggurat* observatories—as at Khorsabad—and the Tower of Babel.[43] It is noteworthy that the external helicoidal ramp ascending these Sassanian towers is repeated again by the Muhammadans in the square minar attached to the mosque of Ibn Tulun,[44] at Cairo, which, though a later restoration was modelled on the original one (dating from *c.* AD 990) it had replaced; and this, in its turn, was copied from the minaret of the mosque at Samarra, near Baghdad, founded by the Khalifa Wathik ibn Mota'ssim in AD 842, as is recorded by Makrisi.[45]

The alternate rounded and angular fluting that is such an attractive feature of the Qutb Minar is undoubtedly a development of the polygonal outline of the Ghazni example; the connection of this feature with any Hindu of Jaina parallels is, I think, too fortuitous to be in any degree probable.[46]

Compared with that of the mosque, the decoration of the Minar is consistently Saracenic in character from base to top, though the somewhat hybrid style of Firozshah's later additions is noticeably distinct. Features of typically Hindu origin are practically non-existent, and only appear as narrow string-courses edging the inscribed bands,[47] and as two minor members of the projecting balconies, the remaining ornament being distinctively Saracenic in character.

The wide encircling bands inscribed with *Naskh* lettering afford a delicate relief to the plain fluted masonry of the great shaft, and are indeed a happy incident of the design; but perhaps the most interesting and effective features are the boldly projecting balconies at every stage, supported on an early type of the 'stalactite' corbelling[48] that is such a universally characteristic and attractive feature of Saracenic architectural decoration, common alike to the Qutb[49] in India and the Al Hambra in Spain.

In seeking to trace the origin and evolution of this alluringly decorative form, it is indeed unfortunate that no record is available of the architecture of the cultured Samanid dynasty,[50] which ruled the country about the Oxus in northern Persia through the last quarter of the ninth century to the close of the tenth; for from this were primarily derived

the subsequent architectural and artistic glories of the Ghazni of 'Mahmud the Great', a city of 'the first rank among the many stately cities of the Caliphate'.[51] Sassanid remains of the fifth and sixth centuries,[52] and the architectural relics of the earlier Arabian Khalifates that they inspired,[53] furnish the undoubted origins of the parent Saracenic style; but between the tenth and thirteenth centuries there is a hiatus, as far as the evolution of the style brought by Muhammad Ghori into India is concerned, and we can only deplore for all time the ruthless vandalism of the Ghori incendiary Alau-d-din Husain Jahan-Soz (world-burner), whose sack and total destruction of Ghazni in AD 1155[54] (which, it is illuminating to remember, took place only sixty-seven years before the buildings at the Qutb were commenced) thus deprives us of another most important link in the chain.[55]

Contemporary examples of Saracenic monuments are, however, left to us in Egypt, and at the mosque of Al Akmar at Cairo is what M. Saladin[56] considers to be the earliest dated example of 'stalactite' corbelling decoration extant, the date of which is definitely recorded as AD 1155. The stalactites in this early example are, it is noteworthy, fully developed in form, and their existence, I venture to think, at once disposes of the theory, expounded originally by Cunningham,[57] that this essentially Saracenic feature as it appears at the Qutb derives its origin from the honeycomb enrichments of shallow Hindu domes (*cf.* the reconstructed Hindu domes at the Qutb, and the eleventh century Dilwara [Jaina] Temple at Mount Abu, Rajasthan).

It is from Islamic centres beyond India that this stalactite decoration comes. The unifying influences at work on the development of Saracenic art are at once realised when one remembers the custom of yearly pilgrimage to Makka [Mecca], which brought its devotees from every Muhammadan country, and provided unbounded opportunities on the long and tedious journey for interchange of ideas and discussion of technical practices among the professions and crafts[58] throughout the Islamic world; the members of which, as yet do those of twentieth century London, would instinctively congregate in occupational groups, impelled by a common human interest. And this dissemination of cultural ideas was again greatly fostered by the potent ties of trade and commerce between the several countries held in the common bond of Islam.

Viewed in this aspect, it is not difficult to understand the universal affinity of Saracenic architecture; a character yet compatible with the separate and distinctive evolution of its variant local styles. [. . .]

The tomb of Imam Zamin, situated immediately to the east of the

Alai Gateway (through which it is approached) is a much later structure, dating from the time of the Mughal emperor Humayun.[59] The tomb has no integral connection with the Qutb group, and its extreme proximity to it is probably to be explained by the supposition that Imam Zamin (otherwise Imam Muhammad Ali), 'a member of the Chistia sect, a Sayyid descended from Hassan and Hussain', who is said to have come to Delhi from Turkestan in Sikandar Lodi's reign, held some office of importance in the mosque.

The tomb is a simple structure some 24 feet square in plan, surmounted by a dome rising from an octagonal drum, decorated with a double row of *kanguras* and with a treatment of marble panelling above the *chajja*. The spaces between the twelve square pilasters supporting the superstructure are infilled with a geometrical *jali* of red sandstone in all but the centre bays of the west and south sides, which contain respectively a *mihrāb* and an entrance doorway, both wrought in marble. Over the latter is an inscription in well-formed *Naskh* characters. Marble is again used in the cenotaph and as a decorative relief in the interior, the radiating ribs of this material in the sandstone dome being a feature of interest. The whole structure of sandstone was originally covered with finely polished stucco, of which a considerable portion is still extant.

Of the remaining buildings within the Qutb area little requires to be said. They have no archaeological connection with the original monument.

There are the remains of a late Mughal *serai*, through the east entrance archway of which the visitor enters the Qutb enclosure. The greater portion of the southern half of this structure, which was very dilapidated, has been dismantled to open up a symmetrical approach to the Qutb mosque area proper.

To the immediate north of this *serai* are the dilapidated remains of a late Mughal garden containing the ruins of some graves in the centre, and of a mosque in the west wall. These remains have also been latterly conserved and the grounds laid out.

The 'Bengali' *chattr* of red sandstone, now situated to the southeast of the mosque, formerly crowned the Minar, on which it was erected by Major Smith in AD 1828 to replace the fallen *chattri* of Firozshah Tughlaq. It was removed at the instance of the Viceroy, Lord Hardinge, in AD 1848, to whom its distressing incongruity with the architecture of the Minar was apparent, and placed on a mound within the actual enclosure of Alau-d-din's extension of the original mosque, whence it was removed to its present position in AD 1914.

Notes and References

1. Delhi, as an historical city and as distinct from the legendary Indraprastha (Indrapat), it should be remarked, dated only from the end of the tenth century AD 993–4, when it was founded by Anandpala of the Tomara clan of Rajputs, who gave it the name of Lalkot (Red City). It was captured from the Tomaras by Vigraha Raja Chohan, about the middle of the twelfth century, to whose kingdom of Sambhar and Ajmir it was merely an appendage, governed at the time of Muhammad Ghori's invasion by the Raja's brother (*vide* Stanley Lane-Poole, *Medieval India*, London, 1902, p. 51.) Delhi has no imperial history prior to the advent of the twelfth century Turks.
2. Ibn Batuta says: 'Before the taking of Delhi it had been a Hindu Temple, which the Hindus called Elbut-khana, but after that event it was used as a mosque.' *Archaeological Survey of India, Reports* (henceforth *A.S.R.* IV.46).
3. Inscription of East Gateway.
4. More commonly known as Shihabu-d-din. Vide V.A. Smith, *Early History of India*, London, 1911, p. 350, n. 9 *Epigraphia Indo-Moslemica*, 1911–12, p. 12.
5. The date recorded in the inscription of the East Gateway of the mosque, it should be remarked, is 587 H (AD 1191), but there are cogent reasons for assuming that this record is not strictly contemporary with the erection of the mosque: *vide Epigraphia Indo-Moslemica*, 1911–12, p. 13; and Smith, *Early History*, p. 358.
6. The questions as to the origin of the Minar—whether erected by the Hindus or by their Muhammadan conquerors—has been, I think, fully disposed of in favour of the latter assumption by the evidence preferred by Cunningham (*A.S.R.* IV, preface and footnotes in text). In a pamphlet latterly produced by Mr R.N. Munshi, *The Qutb Minar*, Bombay, 1911, a number of references extracted from various early Muhammadan writers have been collected, which further support this view; though this author's conclusion that the original minar was wholly the work of Altamish ignores the inscribed dates in Nagari characters, Samvat 1256 (AD 1199) appearing thrice in the lowest storey (*A.S.R.* IV, pp. v and VI), which are still to be seen. The year here recorded antedates by seven years the death of the Ghori Sultan Muizzu-d-din ibn Sam, whose name, as well as that of his brother, Ghiyasu-d-din, with whom he shared the sovereignty at Ghazni (Lane-Poole, *Medieval India*, p. 48) prior to the latter's death in AD 1201 is recorded in the inscriptions encircling the lowest storey of the Minar. These facts are, in my opinion, conclusive evidence of the founding of the Minar during Qutbu-d-din's viceroyalty at Delhi. Another pamphlet dated 1913, produced by Mr Kunwar Sain (Lahore), claims to establish the Hindu origin of the Minar. Its arguments are largely a repetition of those earlier advanced by Beglar (*A.S.R.* IV). The single positive factor put forward to support the case is the existence of a date in Nagari characters inscribed on the first storey of the minar, which the writer reads (dubiously, as he admits) as Samvat 1204 (AD 1146–7), but which other authorities I have consulted agree in reading as Samvat 1704. It is characteristic of the arguments advanced that the writer dismisses Beglar's *volte face* (in regard to his subsequently revised opinion as to the Hindu origin of the structure, *A.S.R.* IV, and preface) with the remark that he 'was subsequently almost made to recant his conclusions (it seems to me) in deference to his Chief'.

The principal contentions put forward in this pamphlet have already been adequately met in a note by Rai Bahadur Daya Ram Sahni, Supdt., Hindu and Buddhist Monuments, Northern Circle, in his Progress Report for the year ending 31 March 1919.

7. Very strong presumptive evidence as to the intended use of the Minar as a *mazinah* lies in the existence, on the second storey, of the inscription containing verses 9–10 of Surah LXII (The Assembly) of the Quran: 'O! True believers, when ye are called to prayer on the Day of the Assembly, hasten to the commemoration of God, and leave mere merchandising. . . . The reward which is with God is better than any sport or merchandise, and God is the best provider.' (*Vide Epigraphia Indo-Moslemica*, 1911–12, p. 26; Sale, *Quran*, Surah LXII, p. 114.
8. The items of evidence that seem to lead to this conclusion may be set out as below:
   (*a*) The absence of the usual exterior projection about the central *mihrāb* in the west wall (*cf.* the later additions by Altamish where such projections do occur).
   (*b*) The existence in the plinth of the north front of the mosque, below the interior pavement level, of three broken *parnalas* of water drains arranged more or less asymmetrically between the northwest corner and the north entrance gateway, which have not been used by the Muhammadans in the drainage of the mosque court.
   (*c*) The difference (amounting to over 1 ft.) in the relative heights of the dado between the upper and lower plinth mouldings on the east and west sides respectively of the north entrance. This dado continues uniformly around the north, west, and south sides of the mosque between the north gate and the south gate.
   (*d*) The presence of typically carved stones from a Hindu temple built promiscuously into the lowest courses of the plinth on the north front, east of the entrance gateway.
   (*e*) The existence on the west jamb of the ruined south gateway of the return moulding of the lower plinth—a feature that does not appear in the corresponding eastern jamb of the same gateway.

   From the above, it would seem that the original temple *chabutra* was accepted as it stood, a gateway to north and south built against its northeast and southeast corners, and the *chabutra* extended by the Muhammadans to complete the eastern half of the present quadrangle with its further gateway on the east.

   Additional support to this view is provided by the results of Beglar's excavations undertaken in the courtyard in AD 1871 (*A.S.R.* IV, p. 27) when two distinct layers of dressed stone paving were disclosed beneath a further rough

stone layer, these former being, in his view, of the original temple. His latterly published opinion (*A.S.R.* IV, p. XV) on this question was that 'the foundations of the inner and outer enclosures, as they stand, are not original Hindu, although doubtless some portion, probably the portion of the foundation of the back wall immediately behind the middle of the masjid proper, is Hindu'. Cunningham's proposition, it should be remarked, was that 'the lower portion of the surrounding walls of the raised terrace on which the masjid stands was the original undisturbed platform of a Hindu temple'. The existence of the carved stones mentioned in item(*d*) above discounts this latter assumption, while the remaining items appear to furnish evidence reconciling the contention put forward above.

The Gondesvar temple at Sinnar, in the Nasik District of the Bombay Presidency, illustrates a similar large square *chabutra*-feature to that which, it is inferred, supported the original temple of Prithvi Raj. Certain of the temples at Khajiraha in Central India are other instances containing this feature that have come to my notice.

With regard to Beglar's excavation in the northwest corner of the masjid, and to the 14 ft. depth of large rubble in filling that he found beneath the paving level here (*A.S.R.* IV, p. 27), the necessity for this unusually great depth of infilling can assuredly be ascribed to the extreme unevenness of the rock site on which the structure is elevated; for, at the southwest corner of Altamish's extension of the mosque, the virgin rock outcrops only some 6 inches below the bottom plinth moulding, which factor also conflicts with Mr Sanderson's assumption (*Annual*, 1912–13, p. 122) that the level of the original temple foundations lies some 20 ft. or more below the level of the inner courtyard of the mosque.

9. The dimensions of the original temple *chabutra* embodied in this area are 124 ft. by 149 ft.

10. On the extension of the mosque by Altamish, the *zenana* chamber in the northwest corner of the original mosque was extended northwards to connect with the first pier of his great screen. This is clearly apparent from the indications existing at this corner, and it is probable that the treatment was repeated similarly at the junction of his southern extension of the mosque, though the remains here have long since disappeared.

11. Cunningham was able to identify both Jaina and Vaishnav sculptures in the masjid (*A.S.R.* IV, p. IV) and I have recently noticed partly mutilated images of Ganpati (a son of Shiva) on a column immediately west of the north gateway, and on a lintel built upside down into the exterior plinth east of the same gate. There is also a seated Jaina image carved on a column in the southeast corner of the mosque; and scenes depicting the 'Birth of Krishna' (an incarnation of Vishnu) occur on carved lintels in the northeast corner.

12. The curving Hindu *torana*-arch connecting the lintel with its supporting columns, as it appears in the Khajiraha temples, at Modhera in Gujarat, and elsewhere, is merely an elaborated 'stay' or strut, and its existence does not qualify the applicability of the term 'trabeate' to express a predominating characteristic of mediaeval Hindu architecture.

The date is inscribed on the face of the south pier of the central arch of the great screen. The screen would appear to have been completed two years after the completion of the remainder of the mosque in AD 1197, which date is recorded on the north gateway, together with the name of Sultan Muizzu-d-ibn Sam. That it was erected *after* the columns of the prayer chamber had been set up is apparent in the fact that the stones of the screen are 'scribed', to use a technical term, round the projections of the column capitals and bases at the south end and are actually built into the back-face of the screen masonry about the central arch.

14. A chemical analysis of the iron made by Sir Robert Hadfield disclosed the following elements in its composition:

Carbon	0.080	per cent
Silicon	0.046	,, ,,
Sulphur	0.006	,, ,,
Phosphorus	0.114	,, ,,
Manganese	Nil	
Total elements other than iron	0.246	,, ,,
Iron	99.720	,, ,,
Total	99.966	,, ,,

Specific gravity, 7.81; Ball hardness, no. 188.

It has been suggested that the pillar was cast in its present form, and not forged; but the extreme purity of the iron composing it would rather tend to discount this possibility.

15. In Altamish's other mosque at Ajmir the very small corbels projecting from the jamb-face of the higher central bay of the great arched screen were probably intended to support the end of a high wooden transom, from which to suspend pendant lamps in front of the *liwan*. From their position it is obvious that no upper storey was intended here. At the Qutb, on the other hand, separate provision in the form of small square slots is made at the level of the arch springing to accommodate the ends of similar light wooden beams to carry the pendant lamps.

16. The date AD 1229 is inscribed on the face of the south pier of the end arch of Altamish's southern extension.

17. The surface decoration of Altamish's similar screen in the *Adhai-din-ka-Jhonpra* mosque at Ajmir is almost identical with that of his screen at the Qutb; and one may readily recognise the prototype of this characteristic Saracenic surface decoration in Byzantine architectural examples, of which the illustration, arch-soffits and spandrels beneath the *gynaceum* galleries of Santa Sophia at Constantinople is an instance. Its early adoption in Saracenic architecture is to be seen in the case of the original base of the restored minar of the mosque of Al-Hakim at Cairo, dated *c.* AD 990 (*vide* Saladin's *Manuel d'art Musulman*, I, 91–7).

18. An early instance of the use of this feature is to be seen in the mosque of Ibn Tulun at Cairo, dated AD 876 (*vide* Saladin, ibid., pp. 80–2).

19. It should be remarked that the identity of this tomb as that of Altamish has not been definitely established. It contains no commemorative inscription. In the *Futuhat-i-Firozshahi*, Firozshah refers to the college and the tomb of Altamish as possessing corner towers, pillars and concrete flooring. That description would not apply to this building best, as Sir John Marshall points out to me, it does apply very accurately to the Sultan Ghari Tomb in the neighbourhood, and this latter tomb, as we learn from an inscription, was erected by Altamish for his son. It is thus quite possible that the tomb ascribed to Altamish may not be his.
20. Sir John Marshall, quoting Mr Creswell, tells me that the squinch-arch is probably of Sassanian origin; and instances examples at Firozabad in Persia (fifth century) and at Sarvistan; at the Martytrion of Mar Tahmasgerd at Kerkuk (AD 590–628). He, however, points out that it also appears elsewhere, at Ephesus in the fourth century; at Khoja Kalessi about AD 400; at San Giovanni in the Fonte at Naples (*c.* 465); at Ravenna (*c.* 500); and at Sancta Sophia at Constantipole (AD 532–7).
21. Fragments of the lowest inscribed course of the circular dome masonry still remain in position on the south side of the chamber.

    The carved fragments of dome masonry stacked together outside the tomb to the north probably belong to the fallen Hindu domes of the Quwwatu-l-Islam mosque adjacent. It is interesting to compare these fragments, carved with the characteristic sunken scollops peculiar to Hindu and Jain domes, with the Saracenic 'stalactites' of the Minar balconies.
22. The *tahkhana* vault beneath is curiously out of alignment with the chamber above, and on excavation by Mr Sanderson in 1914 was found to be filled with fallen rubble debris, to have disturbed which would probably have jeopardised the safety of the whole structure. The three little light shafts and the original step descent on the north side have, however, been permanently exposed to view.
23. The elaborate plinth and the descending flight of steps leading from the openings to the lower level of the ground outside were disclosed during an excavation made by Mr Sanderson in 1914.
24. Amir Khusru, in his *Tarikh-i-Alai*, says: 'The Sultan determined upon adding to and completing the Masjid-i-Jami of Shamsu-d-din (Altamish) by building beyond the three old gates and courts a fourth with lofty pillars, and upon the surface of the stone be engraved verses of the Quran in such a manner as could not be done even on wax; ascending so high that you would think the Quran was going up to heaven, and again descending in another line so low that you would think it was coming down from heaven. When the whole work was complete from top to bottom (an optimistic anticipation on the part of the poet: for it seems certain that the work was never completed), he then resolved to make a pair of the lofty minar of the Jami Masjid, which minar was then the single one of the time (with the exception, it should be remarked, of that at Koel, built by Kuthlugh Khan during the reign of Sultan Nasiru-d-in ibn Altamish in AD 1252 (*A.S.R.* IV, p. IX) and to raise it so high that it could not be exceeded. He first directed that the area of the square before the masjid should

be increased, that there might be ample room for the followers of Islam. He ordered the circumference of the new minar to be made double that of the old one, and to make it higher in the same proportions' (H.M. Elliot and J. Dowson, *The History of India as Told by Its Own Historians*, vol. 3 [1867–; rpt. Delhi, 1996], p. 70).

It has been suggested that this college was built by Altamish, but I think the balance of probability rests with Alau-d-din; the deciding factor, in my judgement, being the high-drummed domes and the more advanced corbelled pendentive treatment beneath them, which are in distinct contrast to the flat conical Hindu type of dome that undoubtedly covered the tomb of Altamish originally, and the primitive squinch-arches which carried that dome across the corner of the tomb.

It should be remarked in this connection that the present lay-out in which a *pakki* path is carried under the isolated arch at the north end of one of these chambers is somewhat misleading, since there was no gateway or other means of entrance in this position originally.

One finds it adopted again in a modified form in the tomb of Ghiyasu-d-din Tughlaq, at Tughlaqabad (*c.* AD 1320), where it is combined with a pointed-arched recess, and later in Sher Shah's mosque in Purana Qila (*c.* AD 1540), under the centre dome.

This simple corbelled treatment of the pendentive in the Alai Madrassa differs greatly in character from the elaborate stalactites that one sees in Cairo and Algiers in a fully developed form, although these latter are some half-century earlier in date. It is true that both forms are derived from a corbel construction, but the Alai Madrassa example lacks that distinctive 'dripping' effect which alone makes the term 'stalactite' applicable to this universal form of Saracenic decoration.

The origin of the *true* pendentive—the triangular spherical support of a dome across the corner of a square chamber—is to be found in Byzantine architectural examples, the most notable of which is of course, the Church of Sanca Sophia at Constantinople (AD 532–7). The germ of the idea can be traced to the so-called temple of Minerva Medica at Rome (AD 268) where a circular dome is imposed on a decagonal chamber, though the actual pendentives here are of very nebulous and tentative form. Sir John Marshall tells me that probably the earliest example of the true pendentive in its developed form is in the Tomb of Galla Placidia at Ravenna (*c.* 440); that the earliest example in Syria is at the Qu-ibn-Wardan, a Byzantine building; and the earliest Islamic instance of its use is at Qasr Amra (AD 712–15).

28. See Appendix ii (a). [This refers to the original book—Ed.]
29. Occurs in the disturbed inscription in the lowest band of basement storey; and this identical title again is prefixed to Qutbu-d-din Aibak's name in the inner inscription over the east gateway of the mosque.
30. As previously stated in fn. 6 *supra*, the names and titles of both Muizzu-d-din Muhammad Ghori and his brother Ghiyasu-d-din occur in the second and fourth bands of the inscriptions in this lowest storey.

31. The first mention of Altamish's name occurs in the lower band of the inscriptions on the second storey, and may, I think fairly be taken to indicate the stage when Altamish took up the work. His name and titles appear again on the doorway of this second storey, where a reference to the 'completion' of the building is given, though the sense of this word is not repeated in the fourth storey inscription where again (as well as in the third storey) Altamish's name and titles are recorded.
32. On one side of the doorway in the third storey is recorded: 'This building was completed under the superintendence of . . . Muhammad Amir Koh.'
33. In spite of Amir Khusru's assertion (*Tarikh-i-Alai*, Elliot and Dowson, *History of India*, vol. 4, p. 70) that Alau-d-din 'directed that a new casing and cupola should be added to the old one', this work was almost certainly never carried out. From the very significant records of this emperor's character in Ziyau d-din Barani's history, and undue altruism is the last quality that could be accredited to him; and we may be sure that the names and eulogistic titles of his predecessors (of a dynasty alien to his own), which are still extant on the Minar, would not have been repeated on a new stone casing—to the total exclusion of his own name!

    In this connection it is of interest to note that though Amir Khusru outlived the Sultan by some ten years, his *Tarikh-i-Alai* only records the events of the reign up to AD 1310. The Sultan died in AD 1315 (*vide* Elliot and Dowson, *History of India*, vol. 3, p. 67).

    The bare record of the name 'Sultan Alavadi' (i.e., Alau-d-din) in Nagari characters, casually contributed apparently by an anonymous visitor to the Minar [which] appears on a doorway in the third storey does not affect the argument, and is of no more significance than the name of Sultan Muhammad Shah Tughlaq that appears on the opposite jamb of the same doorway.
34. *Futuhat-i-Firozshahi*, Elliot and Dowson, *History of India*, vol. 3, p. 383. It may be noted that Sultan Firoz's inscription on the fifth storey of the Minar definitely records that the damage was done in the year AD 1369 that is, after the Minar was seen by Abul Fida.
35. The actual junction of the repair inside the staircase at the beginning of the fourth storey is very clear. While the original interior casing of the Minar is of Delhi quartzite stone, Firozshah's repair is done with red sandstone.

    Against this hypothesis that the fourth storey, as well as the fifth, owes its authorship to Firozshah is the existence here of an inscribed marble band containing the name of Altamish: 'Abul Muzaffar Iltutmisha-s-Sultan' (*not Sultani*, as in the other inscribed bands, be it noted), which might, at first glance, seem insuperable proof that this portion is the original work of Altamish.

    Against this assumption, however, are ranged the following objections:

    (1) The essential unity of the fourth and fifth storeys in point of architectural style, and their distinct contrast with the three lower fluted storeys, which is further marked by a total absence of any marble dressings on these latter.

    (2) The junction of the repair, as evidenced inside the staircase by the change of material at the beginning of the fourth storey (mentioned above).
    (3) The exceptional altruism of Sultan Firoz's character in his dealings with those of his own faith, pathetic attempts at intercession with his Deity on behalf of his erring patron and predecessor, Muhammad Tughlaq (*vide* his *Futuhat-i-Firozshahi*, Elliot and Dowson, *History of India*, vol. 3, p. 385), and his practice of including in the weekly *khutba* the names of his predecessors, which 'had fallen into neglect and oblivion', on the throne of Delhi along with his own name (ibid., 376).

    To a man of his nature, however anomalous it may seem with his times, the restoration of the record of Altamish's name with the full title of Sultan (as distinct from 'Slave of the Sultan' *as-Sultani*) on that portion of the work which in the original must be accredited to him, may well have seemed the merest act of justice: to 'Render unto Caesar the things that are Caesar's'. And in support of this theory there exists in the red-stone facing on this fourth storey, below the above-mentioned marble band, the record of Firozshah's name inscribed in small Nagari characters.
36. As Cunningham remarks: 'Of the existing 379 steps, three belong to Major Smith's cupola, and thirty-seven to the upper storey of 22 ft. 4 inches, which leaves 339 steps to the four lower storeys. In the time of Abul Fida (AD 1330) there must consequently have been twenty-one steps above the fourth storey to make up his total of 360 steps. These would be equal to 13 ft. in height, making the total height in his time 228 ft. 9 inches or 9 ft. 4 inches less than at present (238 ft. 1 inch)' (*vide A.S.R.* I, 195n). This agrees with the statement of Firozshah quoted above. It may be noticed that a Nagari inscription on the third storey records that the Minar was also struck by lightning in the year AD 1328, but no damage is mentioned as calling for repair. It is to be inferred therefore that the Minar suffered no serious injury on that occasion, and that it was substantially intact when Abul Fida saw it in AD 1330.
37. *A.S.R.* I, 199.
38. Ibid.
39. Major Smith's actual words were: 'The former rude and fractured entrance door of the base of the column (was) repaired, and improved with new mouldings, frieze, and repair of the inscription tablet' (*A.S.R.* I, p. 199).
40. *Vide* Saladin's *Manuel d'art Musulman*, vol. 1, p. 112. The prototype of all these examples is to be found in Sassanian architectural features; and an illustration of the use of almost identically shaped *kanguras* is forthcoming in the decoration of the silver Sassanian dish reproduced in Miss Bell's *Palace and Mosque of Ukhadir*.
41. ibid., pp. 86–7. Sir John Marshall tells me that these *kanguras* are a very common feature in Egyptian architecture and are to be seen on many other buildings.
42. The tower at Firozabad is ascribed to Ardeshir (AD 227–40), the founder of the Sassanid dynasty.
43. Saladin's *Manuel*, vol. I, p. 24.

44. Ibid., p. 81.
45. Ibid., p. 91.
46. The only example of a temple *shikhara* of analogous plan I am aware of is the Chalukyan temple of 'Dodda' at Dambal in the Dharwar District of the Bombay Presidency.
47. The laboured endeavours of certain writers to find in the flatness of these bands a definite reason for assuming the previous existence in this position of sculptured Hindu images, and the consequent Hindu origin of the Minar, are not to be taken seriously. I have carefully examined the relief of these inscribed bands, and can state definitely that in each case the extreme projection of the Arabic lettering and the geometrically carved margins of the bands are in a single plane. This is very apparent if one studies the outline of the Minar at dusk, silhouetted against the sky. This uniformity of surface relief is, of course, a universally characteristic feature of Saracenic architectural decoration, and without doubt originated in the undercut surface ornament of Byzantium. It in no way supports the contention that, in the Qutb Minar, it has replaced bands of sculptured Hindu images, of the previous existence of which no particle of evidence exists.
48. It is of interest to note that in certain of the small ventilation slits up the staircase in the lowest storey of the Minar is incised in the jambs the outline of the original masons' full-size 'setting-out' of the 'stalactites'.
49. After the Qutb Minar, however, it is curiously abandoned throughout the Pathan period, but appears again in the wake of the Mughals in the sixteenth century.
50. The Samanid dynasty (AD 874–999) whose sovereignty eventually extended over Transoxiana and Persia, was founded by Saman, a Persian noble of Balkh, who renounced Zoroastrianism and embraced Islam early in the fifth century AD. His four grandsons distinguished themselves in the service of the Khalif Mamun and were awarded with the provincial governments of Samarkand, Farghana (afterwards Babar's little kingdom), Shash, and Herat. Under Ismail of this dynasty, the Samanid Kingdom extended from the Great Desert to the Persian Gulf, and from India to near Baghdad. Its power was most firmly established in Transoxiana, where Bukhara and Samarkand became the centres of civilisation, learning, art, and scholarship for a large part of the Muhammadan world.

    In the later reigns, power fell more and more into the hands of the Turki slaves employed in the court; and one of them, Alptigin, founded the Ghaznavides (AD 994), which succeeded to the Samanid territory south of the Oxus (*vide* Lane-Poole, *The Muhammadan Dynasties: Chronological and General Logical Tables with an Historical Introduction*, Westminster 1893, p. 131).
51. Lane-Poole, *Mediaeval India*, p. 32.
52. E.g. (1) the bridge of Dizful over the Karun (Persia) built by Vaharan V (the 'Wild Ass') AD 420–40 (*vide* Benjamin, *Persia*, p. 210, Saladin, *Manuel*, vol. 1, p. 31).
53. E.g., Haruna-r-Rashid's palace at Rakka in Syria, near Damascus, built in AD 790 (*vide* Saladin, *Manuel*, vol. 1, pp. 323, 433) (see also Pl. XVI).

54. Of all the noble buildings with which the kings had enriched their stately capital hardly a stone was left to tell of its grandeur' (Lane-Poole, *Medieval India*, p. 47). The only remains of Mahmud Ghazni that are recorded to exist relatively intact, I believe, are his own tomb, a Jami Masjid, and two separate minars or pillars of victory; and of these no adequate description is available (*vide* Fergusson, *History of Indian Architecture*, vol. 2, 193).
55. The carved deodar gates of Mahmud Ghazni's tomb brought by Lord Ellenborough from Ghazni in AD 1842 are the only relic of this period accessible to us, and are thus of especial value as a minor link in the chain.
56. Saladin, *Manuel*, vol. 1, pp. 95, 103. Other contemporary examples of this decorative feature occur in: (*a*) the Gate of Chilla, in Sedrata, Algiers (AD 1178–84); (*b*) the Palace of the Ziza, at Palermo (AD 1154); and (*c*) in the *mimbar* of the mosque of Al Aksar, at Jerusalem, brought from Aleppo by Saladin on his restoration of the mosque in AD 1187 (ibid., pp. 62, 235, 237).
57. *A.S.R.* I, p. 190.
58. M. Saladin puts this very cogently in the following passage: 'Le pèlerinage annuel de la Mecque, obligatoire pour tout bon musulman, mettait en contact, aux époques de paix, des gens de tout pays. Par une affinité naturelle, les gens de même métier se réunissaient de préférence entre eux et réagissaient les uns sur les autres. Le voyage de la Mecque était long et onereux pour les artisans de pays extrêmes, et les plus pauvres devaient s'arrêter et travailler le long du chemin afin de se procurer les ressources nécessaires. Pendant les séjours plus ou moins longs qu'ils faisaient dans les villes, les plus intelligents d'entre eux pouvaient apprendre les procédés de construction, les tours de main. Ils voyaient des modèles nouveaux cherchaient à, les imiter lorsqu'ils revenaient chez eux. Ainsi faisaient jadis chez nous les Compagnons du Tour de France', *Manuel*, vol. 1, p. 11).

    This consideration will also go far to explain the markedly individualistic development of Indo-Saracenic architecture under the Pathan dynasties. Whereas from Ghazni, Samarkand, or Khorasan the route to Makka and the Hajjaz lay overland through Iraq and via Baghdad, whence a regular Pilgrims' Way was laid out and maintained by the Abbassid Khalif Mehdi (AD 775–85) lined with wells, *serais* and distance stones (*cf.* the Indian *kos* minars), the journey from India itself entailed for the subsequent Pathan settlers a segregated voyage by boat from the ports of Gujarat direct to Jedda in the Red Sea, which brought them within some 60 miles of Makka itself, and thus very considerably curtailed their opportunities of intercourse *en route* with pilgrims from other Muhammadan countries. It is true that there was an alternative route by land open to the Indian pilgrim via the coast of Sindh and Makran and along the Persian Gulf; but there is no question as to which would entail the less hardship to the traveller, and which in consequence would be the more largely followed. It is of interest to note that Indian Muhammadan pilgrims of the present day are still transported by boat to Jedda under the arrangements made by [the] government with Messrs. Thomas Cook, of 'Tourist' fame. For early records of sea-traffic between India and Arabia, see Lane-Poole, *Mediaeval India*, p. 5; Elliot and Dowson, *A History of India*, vol. 1, pp. 2, 61, 67; pp. 61,

67, Albaruni (AD 790); pp. 77, 84, 87, 89, Al Idrisi; pp. 1156, Al Biladuri p. 288, Taikhi-Tahiri (AD 1591); Appendix vol. I, pp. 415, 444, 447, 539, vol. II pp. 95–6, 98, Abdul-Razzak (AD 1441); p. 298, Musakhi-Jahanara (AD 1676) vol. V, p. 264. Tabakati-Akbari; vol. VII, p. 350, Khafi Khan; and, Niccolo Manucci, *Storia do Mogor*, London, 107–8, vol. II, pp. 276, 488.

With the advent of the Mughals the Persian influence revives, and the stalactite string-courses and other Saracenic elements of the Tomb of Timur at Samarkand, make their appearance again in the architecture of his descendants in India, the 'Great Moguls'. Stalactite decoration is first to be seen again ornamenting the hollow string-moulding at the springing of the dome of Humayun's Tomb at Delhi (*c.* 1556–72), built by his queen Hamida Banu (Hajji) Begam, daughter of his brother Hindal Shaikh, 'a Sayyid of the Prophet's race' (the Koreishites) [Quraysh-ites].

59. Ensign Blunt's account, *Asiatic Researches of Bengal*, vol. 4, p. 324, AD 1794, Blagden, *Brief History of Ancient and Modern India* (AD 1805). Both the above illustrate *kanguras* of a crude form on the balconies, as does also another early drawing of the Minar exhibited in the Delhi Museum (Cat No. J. 51). The Museum drawing shows six storeys instead of five! An Indian drawing exhibited in the South Kensington Museum (a photographic reproduction of which was very kindly given to me by Mr Griessen, Arboricultural Superintendent, Delhi) shows the Minar standing on a high wide *chabutra* measuring some three times the diameter of the Minar base in width, and almost equalling it in height. From the style of the drawing, it would appear to have been made within the last fifty years or so. Smith's *chattri* is significantly missing, and the decoration applied to the *chabutra* is typical of the late Mughal period, while it would be impossible to accommodate a base of its size in the limited area of the actual site. So I think it may be stated with little doubt that this *chabutra* cannot claim to be an authentic feature (though one of a more modest size might conceivably exist beneath the present made-up ground level), but owes its appearance in the drawing to the accommodating conscience of the draughtsman, who thought a *chabutra* would add to the effect of his picture.

CHAPTER I.5

Monuments of the Mughul Period*

PERCY BROWN



To Babur, fresh from the flourishing cities of his fatherland embellished with the magnificent buildings of the Timurids, the state of the cities and towns of Hindustan must have afforded a striking contrast. Conditions in northern India for a long period had been such as to give little encouragement to the building art, few edifices of any importance had been constructed, and those monuments which told of the splendour of an earlier age had been suffered to fall into decay. [. . .] Lahore, once adorned by the palatial residences of the Ghazni and Ghori sultans, was almost in ruins. Agra, to which the Lodis had moved their court, contained only a brick citadel in a state of disrepair. At Delhi it is true there remained substantial records of ancient architectural grandeur, 'but now worn out and disfigured to the last degree'. Babur, from his camp near the river, made a tour of this historical site, much as a visitor would do the round of its various relics at the present day. He was compelled to pitch his tents here because the most recent city built by Firuz Tughluq had been abandoned some time before, and except for its mosque, lay derelict. [. . .] One place only seems to have moved Babur to any degree of enthusiasm, and that was at Gwalior, where he 'went over all the palaces of Man Singh and Vikramjit', and remarked that 'they were singularly beautiful, though built in different patches and without regular plan'. These buildings, however, illustrated the prevailing type of secular architecture as practised by the

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Hindus early in the sixteenth century and it was to such structures that the Mughuls turned when they began to build palaces of their own.

Babur was a shrewd, but perhaps prejudiced, critic of the art of building in Hindustan, as his *Memoirs* repeatedly indicate. Although he praises the remarkable dexterity of the Indian workman, especially the stone-masons, he complains of the slipshod manner in which they designed their structures, without 'regularity or symmetry', faults which would readily offend the inherent taste of the Mughuls for strict formality and balance. In spite of this he embarked on several building projects of a fairly ambitious order, for he states that '680 men worked daily on my buildings in Agra, . . . while 1,491 stone-cutters worked daily on my buildings in Agra, Sikri, Biana [Bayana], Dholpur, Gwalior and Kiul'. Most of these craftsmen, however, appear to have been engaged on the construction of pleasaunces, pavilions, baths, wells, tanks, and fountains, for as an out-of-doors man, such extemporary amenities appealed to him more than palaces or public buildings, and, having no religious or sentimental character, they were allowed to fall into decay and have entirely disappeared. Three mosques attributed to Babur have survived. One of these in the Kabuli Bagh at Panipat, and another, the Jami' Masjid at Sambhal, were both built in AD 1526. Although fairly large structures, neither of them possesses any special architectural significance, while of another mosque which he built about the same time within the old Lodi fort at Agra, he himself complains that it 'is not well done, it is in the Hindustani fashion'.[1] Some of Babur's dissatisfaction at the state of the building art may be traced to his having acquired in the course of his varied career a certain knowledge of the manner in which such things were done in Europe, as on one occasion he fortified his camp 'in the Rumi way', meaning no doubt in the western, or Byzantine, fashion. [. . .]

Had circumstances permitted, Babur's son and successor, Humayun, would have left more than one monument as a record of his intermittent rule. But the political situation was unfavourable. As it was, one of his earliest undertakings was to build at Delhi a new city to 'be the asylum of wise and intelligent persons, and be called Dinpanah (World-refuge)'. It was to contain a 'magnificent palace of seven storeys, surrounded by delightful gardens and orchards, of such elegance and beauty that its fame might draw people from the remotest corners of the world'. The laying of the foundation stone of this, the first Mughul capital, is thus described by one who was present.

> At an hour which was prescribed by the most clever astrologers and the greatest astronomers, all the great *mushaikhs* (religious men), the respectable *sayyids*, the learned persons, and all the elders, accompanied the King to the sacred spot, and prayed the Almighty God to finish the happy foundation of that city. First, His Majesty with his holy hand put a brick on the earth, and then each person from that concourse of great men placed a stone on the ground, and they all made such a crowd there that the army, people, and the artists, masons, and labourers found no room or time to carry stones and mud to the spot.[2]

As it is also related that 'the walls, bastions, ramparts, and the gates of the city' were all nearly finished within the same year, it seems not unlikely that the work was pushed on with undue haste, without much consideration of its quality. In any case Humayun's capital is hardly traceable among the ruins of old Delhi, although its final demolition seems to have been one of the first acts of the Afghan usurper, Sher Shah. Two mosques remain of those built during Humayun's reign, one in a ruinous condition at Agra, and the other at Fathabad, Hissar, which indicate the methods of building in vogue at this period. They show no original features, being constructed of ashlar masonry covered with a coating of stucco, the only attempt at ornamentation consisting of geometrical patterns sunk in the surface of the plaster. It is probable that the city of Dinpanah was of the same simple unassuming character, rapidly 'run up' to supply an immediate need.

Although owing to the unsettled conditions of the country but little encouragement to architecture was possible during the early years of the Mughul dynasty, a few buildings of a private character which were erected in the neighbourhood of Delhi show that the style of the Sayyids and Afghans as produced in the previous century still continued. A tomb, with its adjoining mosque, known as the Jamali, built about AD 1530, illustrates the demand that was then arising for a richer and more decorative treatment of these rather sombre structures. The Jamali mosque will be referred to later, as its connection with a phase of building which succeeded it is important. But the Sayyid–Afghan style was more suitable for tombs than for any other purpose, as several mausoleums built near Delhi about this time testify. That of 'Isa Khan, erected in AD 1547, is a well-balanced composition, standing within its own walled enclosure, and including a mosque on its western side. Enclosure, terrace, platform and mausoleum are all designed on an octagonal plan, with eight kiosks of the same shape rising above its crenellated parapet.

Each angle of its pillared verandah is strengthened by a sloping buttress, the final instance of the use of this 'batter', which, introduced by Firuz Tughluq, had now persisted for two centuries. In another large tomb in much the same style, that of Adham Khan, constructed some twenty years later, there is no sign of this characteristic slope, which evidently ceased with the tomb of 'Isa Khan. Adham Khan's tomb is the last building of this type, and although it can hardly be described as decadent, its trite and uninspiring elevation conveys the impression that the potential growth of the style was at an end.

During the period, however, that the Sayyid–Afghan mode was approaching its logical conclusion at Delhi, it is significant of the unexpected course that events not infrequently take in Indian history, that in another and distant part of the country a group of buildings in this same style was being produced which are undeniably the finest of their kind. At Sasaram in Bihar, and in its neighbourhood, a series of tombs was erected, all probably within the decade before AD 1550, commemorative of the house of Sher Shah Sur and its association with the government of the lower Provinces. They are all buildings of noble proportions, the largest of them, that of Sher Shah himself, being one of the most admirable monuments in the whole of India, and thoroughly expressive of the Indian genius. Much of this excellence is undoubtedly a tribute to the cultural intuition of Sher Shah, which not only shows itself here, but, at a slightly later date, at Delhi also. From the imperial capital this Afghan governor obtained his ideas of what a royal mausoleum should be like, and from somewhat the same source he secured the services of the master-builder who was to put his plans into effect. The designer of these edifices was one Aliwal Khan (whose tomb is one of the group), from his name apparently a native of the Punjab, a skilled mason and evidently well-acquainted with the art of tomb-building as ordained by the court at Delhi. His first commission at Sasaram was the erection of a mausoleum for Hasan Khan Sur, the father of Sher Shah, a solid structure in much the same style as several of the royal or official tombs of the Sayyid or Lodi period. Viewed, however, as a whole, this initial effort is not a complete success. The uninteresting octagonal wall forming its middle storey, unbroken by any opening, is a definite fault, and it seems not improbable that this tomb was of an experimental nature in view of what was to follow. Aliwal Khan's next work, destined to be his magnum opus, was the mausoleum of his patron, a conception which, apart from its surpassing architectural merit, reveals an imagination of more than ordinary power. Standing in the midst of a spacious

artificial lake, it forms an ideal funerary monument to such a remarkable soldier-adventurer as Sher Shah, a magnificent grey pile emblematic of masculine strength, and at the same time the embodiment of eternal repose.

The plan of isolating one's burial place from the outer world by means of a sheet of water had already occurred to Ghiyas-ud-din Tughluq some two centuries earlier, when he designed his tomb like a barbican thrown out from the fortress at Tughluqabad and surrounded it with a lake. Inspired no doubt by the originality and significance of this, by now, historical monument, Sher Shah's mausoleum was designed on somewhat similar lines, except that instead of the irregular lake, it rises from a large rectangular tank, the cemented sides of which measure each approximately 1,400 feet in length. The tomb building itself occupies the centre of this body of water, forming a grand pyramidal mass of diminishing tiers, mounting up from a stepped plinth of over 300 feet wide, and crowned by a semi-spherical dome. The plinth and the high terrace above it, which comprise the foundations of the composition, are square in plan, while the tomb building above is an octagonal structure in three storeys, a slightly elaborated form of the Lodi tombs at Delhi, but made vastly more imposing by its size, situation, and particularly by the massive and spacious character of its stepped and terraced basement. Much skill has been expended on the design and disposition of the architectural details, which break up the mass of the building with admirable effect. Flights of steps with entrance archways relieve the middle of each side of the terrace, and domed octagonal pavilions ornament each corner, with projecting oriel-balconies carried on heavy brackets in between. The upper surface of this immense substructure forms a courtyard, within which stands the mausoleum proper. This building is enclosed within an aisle of pointed arches, three to each of its octagonal sides, and shaded all round by a solid lotus finial. The interior of the tomb consists of one large vaulted hall, octagonal in shape and surrounded by an arcade of arches; it is somewhat bare and plain, and may be unfinished. Seen across the rippling waters of the tank, the entire composition now appears grey and sombre, but this was by no means the original intention. It is the greyness of age, as, when first built, its walls displayed patterns of glowing colour, and the dome was set brilliantly white against the blue sky. Traces of this glazed decoration still remain, fine bold borders of blues, reds, and yellows, in keeping with the grand scale of the building itself. Access to the mausoleum is obtained by means of a causeway built across the water, the entrance to

which is through a square domed guardroom on the northern side of the tank. [. . .] In the course of building the mausoleum of Sher Shah a curious error in orientation seems to have occurred, there being a difference of eight degrees between the alignment of the stepped plinth and that of the terrace above. The latter faces the true north, but the mistake in the direction of the foundations was evidently discovered and the required correction made while the building was in progress, a fact which must have added considerably to the difficulties of this construction; although noticeable, it does not materially detract from the general appear-ance. The other tombs of the Suri group, five in number, all in the Shahabad district, are of the same general type, but each one has some distinguishing feature, such as the specially designed gateway of Aliwal Khan's, the architect, or the entrance to the enclosure of Hasan Khan's, while the others shows variations in the composition of their façades. Excellent though they all are, none of them approaches the solemn grandeur of Sher Shah's last resting-place, which takes first rank in magnificence of conception. Its pyramidal mass, the silhouette of which seen at sunset is something to be remembered, the sense of finely adjusted bulk, the proportions of its diminishing stages, the harmonious transitions from square to octagon and octagon to circle, the simplicity, breadth, and scale of its parts, all combine to produce an effect of great beauty. India boasts of several mausoleums of more than ordinary splendour; the Taj at Agra in some of its aspects is unrivalled; over Muhammad 'Adil Shah's remains at Bijapur spreads a dome of stupendous proportions, but Sher Shah's island tomb at Sasaram, grey and brooding, is perhaps the most impressive of them all.

The architectural activities of the house of Sur were not, however, confined to Bihar. With Sher Shah elevated to the throne vacated by Humayun, the building art was again revived at the imperial capital, where it was undergoing an interesting state of transition. Delhi had for some time established a tradition somewhat parallel to that of classical Rome, in that it maintained an imperial style of its own as distinct from that of the provinces. Towards the middle of the sixteenth century there were signs of a renaissance. The art was beginning to throw off that puritanical influence which had fettered it since the time of Firuz Tughluq, and apparently was attempting to return to the more ornate style of the Khaljis. For 200 years this austere method of building had prevailed, preventing the Indian artisan from exercising his natural aptitude for fine ashlar masonry, and from decorating the edifices thus constructed with rich carving, both of which were his birthright. Already indications

of such a movement are observable in buildings dating from the beginning of the sixteenth century, as for instance in the Moth-ki-Masjid, where, among other innovations, in place of the 'beam and bracket' opening in the centre of the façade, ordained by Firuz and continued by his successors, there emerges again the recessed archway of the early Tughluqs and Khaljis. Some twenty years later, a further step is seen in the treatment of the Jamali Masjid, with its ashlar masonry laced with white marble, and more important still, its double recessed arch enriched with 'spear heads', signifying a definite attempt to pick up the threads of the older style. What was required at this stage was intelligent patronage to stimulate the movement, now well begun, into further effort. This was supplied by the building predilections of Sher Shah, who, had he lived longer, would undoubtedly have influenced very profoundly the character and course of the art. As it was, during the short time that he ruled at Delhi, a form of architecture was initiated which was not only of a high character in itself, but was destined to affect considerably the styles which followed.

The Afghan ruler's first act was, however, destructive, as he razed to the ground Humayun's city of Dinpanah, founded so auspiciously a few years previously, and in its place, on the site of Indarpat, began to build a new walled capital containing within it a strong citadel for his own accommodation. Owing to his untimely death the city itself was never finished—only two gateways remain—but the citadel known as the Purana Qil'a, although now little more than a shell, is still intact, and its walls and gateways, together with one building in its interior, form an important landmark in the architectural development of the period. Its bastioned ramparts, massively constructed of rubble masonry, are marvels of strength, while the bold battlements protect a wide parapet walk, underneath which is a spacious double arcade carried around its entire circuit. On their outer side these plain rugged walls are relieved by ornamental machicolations at frequent and regular intervals, with an occasional balcony projected on brackets. As a contrast to the severely practical nature of these defences, and also to their rough rubble construction, are the gateway built of fine sandstone ashlar decorated with white marble inlay and coloured glaze. In the design and execution of these gateways we seem to see the beginnings of a more refined and artistically ornate type of edifice than had prevailed for some time. That a development of this kind was taking place is proved by the character of the only building of any note now left within the walls. This is a mosque, the Qil'a-i-Kuhna Masjid, a structure of such admirable architectural

qualities as to entitle it to a high place among the buildings of northern India.

Reference has already been made to the Jamali Masjid, and it was out of this that the Qil'a-i-Kuhna Masjid was evolved. Each mosque has a double arch for its fronton with two archways in each of its wings. The interiors of both consist of one large hall divided into five bays, there is one central dome, and the systems of pendentives supporting the roof have much in common. The Qil'a-i-Kuhna was built in AD 1545, some fifteen years after its prototype, and depicts in a most decisive manner the advance that took place in that short period. Every feature, somewhat crudely fashioned in the earlier example, was carefully refined, improved or amplified during this time, in order to fit it for its place in the finished composition of the Qil'a-i-Kuhna. This mosque was evidently the Chapel Royal of Sher Shah and the perfection of its parts may be due to his personal supervision. It has no cloisters, although there is a courtyard in front, with an octagonal tank in its centre, and at the side is a doorway to serve as the royal private entrance. The mosque is not large, occupying a rectangle of 168 feet by 44 feet, and its height is 66 feet. There is a handsome stair turret at each of its rear corners, with oriel windows on brackets at intervals. All these features have been carefully disposed, but the chief beauty of the building lies in the arrangement of its façade. This is divided into five arched bays, the central one larger than the others and each having an open archway recessed within it. With these as the basis of his scheme the designer has enriched each part with mouldings, bracketed openings, marble inlay, carving and other embellishments all in such good taste that the effect of the whole is above criticism. The interior is equally pleasing. Archways divide it into five compartments which correspond to the five façade openings, and recessed in the west wall of each is an elegant *miḥrāb*. In the support of the roof three different methods have been exploited. The central bay, roofed by the dome, has the usual squinch-arch as a pendentive, but the others, although they have no domes, have vaulted ceilings necessitating some kind of support in the angles. In one instance this support is formed of diminishing rows of brackets with small ornamental arches in between, a most artistic solution of this constructive problem. But the method adopted in the end bays shows more originality; a flattened arch is thrown across, leaving a space at the back which is filled in with a semi-dome, pendentives supporting the corners, a daring experiment and not perhaps one to be repeated, but the whole building proclaims the artistic and inventive skill of the architect. Where, however, this craftsman excelled was in the design of the *miḥrāb*s, which, of their kind, can have

no equal in any other mosque in India. An arched niche is commonly the form these take, but by sinking one recess within another, and by turning them over, he provided himself with a foundation inviting decoration. His material was marble, and the sure manner in which he has manipulated this, and the effect produced, is beyond praise.

With the Qil'a-i-Kuhna mosque, however, this mode of building virtually begins, and also ends; it stands as an isolated example among the different types of structures which lie around old Delhi. [. . .] For the following twenty years little building of any importance is recorded, the few structures that were erected reflecting the unstable political conditions that then prevailed. The only contribution of his successor Salim Shah consisted of a fort, named after him, on the banks of the Jumna, a group of frowning bastions of no architectural merit, now considerably dismantled and converted into an outwork to Shah Jahan's more famous palace-fortress. Somewhat later, about AD 1560, two buildings were raised at Delhi, and it is perhaps significant of the times that they were not founded by men, all of whom were engaged in less peaceful pursuits, but by women, members of the royal household. One of these is the mosque of Khair-ul-Manazil and the other a larger hostel known as the Arab Sarai. Neither, in itself, is a work of much importance, but portions of them show that the mode initiated by Sher Shah was still remembered. The mosque is unusual because it has an upper storey of classrooms enclosing the courtyard within a high screen, an arrangement for strict seclusion which suggests that the school was for girls, and the mosque for the use of women only. Its architectural interest, however, lies in the handsome gateway by which it is entered. This consists of a doorway recessed within a large arched alcove, similar in many respects to those in the buildings of Sher Shah. But there is one notable difference. The wall containing the doorway is joined above onto the outer archway by means of a semi-dome, a stage in the development of a prominent feature common in the façades of the Mughuls. This, however, is only one instance of the influence that the able craftsmen under the Sur dynasty exercised on the architecture that followed. Much of the character of the works carried out under Akbar and Jahangir may be traced to the genius of the master-builder who produced the remarkable little mosque in the citadel of Sher Shah.

It was not until Akbar had occupied the throne for eight years that the country became sufficiently settled to enable any large building projects to be contemplated. Then the encouragement of the arts began in real earnest. About the year AD 1564 at least five building schemes of varying importance were commenced in different parts of the empire,

three of them of the first rank, and the others illustrating in a marked manner certain developments that were then taking place. Of the larger schemes, Humayun's tomb at Delhi is the most noteworthy, although Akbar's fortress-palaces at Agra and Lahore were stupendous undertakings. Compared with these imperial enterprises the tomb of Muhammad Ghaus at Gwalior appears a small affair, but the peculiarities of its design are of some interest, while the tomb of Adham Khan at Delhi previously described, is significant because it rings down the curtain on the 'Lodi' style, a mode which had persisted for nearly two centuries. It is a coincidence that at practically the same time that this final example of the puritanism originated by Firuz Tughluq was being constructed four miles away, in the building of Humayun's tomb, an entirely new movement was being begun. In other words Adham Khan's tomb marks the death of one tradition, and Humayun's tomb the birth of another. The latter, besides being a composition of more than ordinary breadth and power, introduces a new era into the history of architecture in northern India. Some of its parts, notably the shape and construction of its dome, are clearly adaptations of somewhat similar buildings in the cities of the Timurids in Persia. This attribution is readily explained. The tomb was built by Humayun's widow, Haji Begam, who shared his long exile at the court of the Safavids. Moreover, as architect she employed Mirak Mirza Ghiyas, almost certainly of Persian extraction and therefore trained in the Timurid tradition. He, with others having somewhat similar affinities, formed part of a small colony of the Begam's retainers who had settled in Delhi. The influence of their culture shows itself in the character of Humayun's tomb. But in the process of transforming the style of one country to suit the conditions of another, certain changes became necessary. Some of these changes are due to the differences of material; the Persians built almost entirely of brick with decorations of terracotta and glaze, and the Indian masons had to translate these fictile forms into chiselled marble and stone. But the design of Humayun's tomb did something more than introduce other elements into the architecture of Hindustan; it suggested new principles, wider possibilities, greater flexibility, and generally infused the building art with fresh life. There were subsequent occasions when the Mughul artists received inspiration from the same source, but the main Persian incentive came to the building art of the Mughuls through Haji Begam's conception of her royal consort's mausoleum.

One of the most attractive features of this composition as a whole

is the innovation of placing the building in the centre of a large park-like enclosure. It had already become the custom to surround the tomb with a walled-in space, but the idea of expanding this into an extensive formal garden was entirely that of the Mughuls. The garden around a Mughul tomb, with its paved pathways, flowered parterres, avenues of cypress trees, ornamental watercourses, tanks and fountains, was considered by them an essential complement to the mausoleum building in the centre. Added to this the entrance gateways, one in the middle of each side of the perimeter wall, were structures of fairly generous proportions, well disposed and designed as to serve as a prelude to the monument without the arched shape of the main portal being of such dimensions as to frame in a most striking manner the distant tomb. The principal entrance to the enclosure of Humayun's tomb is on the western side, and the doorway is recessed, instead of being embowed as was usual in all subsequent doorways, but this was done in order to repeat, like a refrain, a similar recessed effect in the façade of the main building. This main building stands on a high and widespread terrace, the sides of which are arcaded, each arcade leading to a small room within for the accommodation of visitors to the tomb. On the broad platform formed by the upper surface of this terrace the mausoleum stands, occupying a square of 156 feet side. This square plan is recessed in the middle of each side, and its corners are chamfered, thus producing in the elevation of the building a variety of contrasting planes and shade effects. All four façades, save for a slight deviation on the north side, are similar, their main characteristic being a large rectangular fronton set back in the centre, and containing a deeply recessed archway, with smaller corresponding archways in the projecting wings on each side. Much of the attractive appearance of the building is due to the size and excellent spacing of these recesses in relation to the remainder of the façade, the apportionment of solid to void being most skilfully regulated. Above the façade rises the great dome mounted on a high drum, with a combination of kiosks roofed by small cupolas and slender turrets breaking the skyline at its base. The arrangements in the interior comprise a spacious central hall, rising to a vaulted roof, and around this main hall are grouped several subsidiary chambers on a regular plan, and connected one with another by galleries and corridors. Light is obtained through clerestory windows of perforated screens fitted within the recessed archways of the façade.

Apart from the simple comprehensiveness of the total conception, proclaiming it a building of exceptional merit, the principal architectural

feature which distinguishes it from anything previously attempted in the design and construction of the dome. In shape the dome, with its finial rising straight from the apex without any intervening *amalaka*, was clearly derived from a type not uncommon at Bukhara and Samarqand in the fifteenth century, of which the tombs of Timur and Bibi Khanum are examples. It is not, however, a copy of either of these, but there is a fairly strong family likeness. The slightly constricted neck with its decorated cavetto is from the same source, but the Timurid domes usually finish at the base in a stalactite moulding, which the Indian mason converted into a course of small brackets. Further, the white marble casing, with which the whole of the latter is covered, is in marked contrast to the brilliantly coloured tiles which invariably supplied the finish to the Persian type. But it is in the constructive principle adopted in the dome of Humayun's tomb that the main concession is made to the ingenuity of the Timurid builders and their predecessors. Here we see for the first time in India the use of the double dome, a method of building these structures which had been practised in western Asia over a considerable period. One of two of the low-pitched domes of the previous style, notably that of the tomb of Sikandar Lodi, show attempts at this system of construction, but their flattened shape did not encourage its use, and it apparently found no favour. In Humayun's tomb the principle was correctly applied, the dome being composed of two separate shells, one outer and an inner, with a vacant compartment [in] between; the outer shell supports the white marble exterior casing, while the inner forms the vaulted ceiling of the mortuary chamber below. In addition to the character and technical details of the dome, other features of the building show a similar influence. Among these is the large recessed archway with its surrounding rectangular fronton, the central element on most Mughul façades, and one which in an immature form had appeared during the previous period. In Humayun's tomb this effective conception was fully developed, showing, together with other motifs, its designer's further obligations to the architectural traditions of Persia. While adapting, however, the Timurid type of building to suit the materials and methods of the Indian workman, one factor was overlooked. In the Persian style almost all mouldings were purposely omitted, in order that the surface of the buildings should be kept clear for the application of coloured tiles, to the brilliancy of which they owed their principal effect. The bare, almost frigid, appearance of Humayun's tomb, in its decorative aspect, may be traced to its designer's inability to replace successfully this colour scheme by a suitable one in stone and marble.

that the effort was made is shown by the borders and panels of white marble inlay applied with such good results; but in outlining the archways with the same material the severity of the façade is emphasised. As to the disposal of the rooms in the interior, this appears to be an elaboration of the plan generally adopted in Muslim tombs in India, but the diagonal connecting passages may have been suggested by a similar arrangement in Persia, as seen in the tomb of Safi-ud-Din at Ardabil. The fact that the design of Humayun's tomb did not immediately commend itself to the Mughuls and thus revolutionise the building art of India seems to indicate that it was in advance of its time. A small tomb, however, nearby, enshrining the remains of Atga Khan, is of somewhat the same type in miniature, and was produced at this time probably by those employed on the royal mausoleum. But although the superior style of the latter could not fail to influence the later work of Akbar's reign, it was not until more than sixty years had elapsed before the Mughul builders were sufficiently inspired to attempt another tomb of the same type.

That even in the production of works to serve a utilitarian purpose the Mughuls at this time were inclined to employ labour drawn from sources not far removed from Persia is shown in a famous bridge built at Jaunpur. Begun as early as AD 1564 to conduct the road across the Gumti, it was devised and carried out by workmen imported from Hazara in Afghanistan, noted for their engineering skill. Into the design of this bridge the builders introduced appropriate decorative elements which have made it a handsome structure of good architectural appearance. It consists of ten spans of pointed arches with substantial piers carried up into pillared pavilions partly projected over the water on brackets. The whole composition provides an excellent illustration of the aesthetic spirit that then prevailed, and of the manner in which an object primarily intended for use can, with correctly applied taste, become also a work of art.

Meanwhile in the somewhat distant and hitherto Hindu environment of Gwalior the tomb of Muhammad Ghaus was being constructed, the unusual character of its design lending this building a certain interest. Erected over the remains of a Muslim saint who flourished under the early Mughuls, it combines characteristics of the 'Lodi' style, together with others associated more with the kind of building that found favour in western India. This admixture was no doubt due to the actual workmanship being entrusted to the local masons more accustomed to the requirements of Malwa patrons than to the demands of their new Muslim overlords. The building shows a lack of coordination, the two phases,

the Mughul and Malwa, having not yet coalesced, a condition to be attained later under the tolerant policy of the emperor Akbar. Nonetheless it contains some choice details, especially in its perforated screens, but the attachment of the hexagonal corner-turrets by their angles causes the general effect of the elevation as a whole to appear disconnected.

After Humayun's tomb, however, the most important building projects of this time were the two palace-fortresses begun by Akbar at Agra and Lahore. These were the first notable efforts made by this emperor, and were executed 'under the superintendence of Qasim Khan, the overseer of building and ships'.[3] Of the fort at Agra it was said that no such walls had ever been raised before, 'from top to bottom the fire-red hewn stones are joined so closely that even a hair cannot find its way into their joints'. They were composed of a massive interior core of rubble and concrete faced with carefully worked blocks of sandstone 'linked together by iron rings'. These blocks of stone were laid in alternate courses, a wide course separated by narrow bond-stones, a method of construction which is found in nearly all the buildings of Akbar's time. The walls of Agra fort, just under seventy feet high, consist of a continuous stretch of almost unbroken masonry nearly one and a half miles in circuit, the first conception of dressed stone on such a large scale. The somewhat irregular plan of the fort is probably due to the walls having followed the lines of the original Lodi defences of which it took the place, and its position in relation to the river Jumna had also to be considered. From a distance across the river it resembles the stranded hull of a rusty red battleship, its sombre mass relieved by the group of white domes and kiosks of the Moti Masjid rising like armoured turrets above. It is entered by two gateways, the main entrance on the western side, known as the Delhi Gate, being undeniably one of the most impressive portals in all [of] India. It is the ceremonial entrance to the fortress (the other and smaller gateway of Amar Singh being for private use), and originally its main archway was flanked by two statues of elephants; hence it was often referred to as the *Hathi Pol* or 'Elephant Gate'. As it was finished in AD 1566 it is one of the earliest of Akbar's productions, and shows that that emperor's builders had already realised the high standard that was required of them. It is devised on the usual plan of an archway flanked by two bastions, but it is the masterly manner in which this simple scheme was handled that gives it such an imposing and at the same time artistic appearance. Taking the octagon as his theme, the designer has made the bastions, the vaulted chamber [in] between, and the domed

crowning the battlements, all eight-sided in plan. Height was obtained by the whole being in two storeys, with the bastions divided transversely by a balcony on brackets, a projection which gives a most useful sense of interruption to the façade. Openings below would only weaken the appearance of a building obviously required for strength, so that except for the main archway the lower storey has no voids, but above the balcony are arched recesses producing the necessary effect of depth and substance. Considerable interest attaches to the manner of treatment of the entire surface of arcades and panels, while coloured tiles of winged dragons, elephants and foliated birds add vitality to a composition which in itself is remarkable for animation and strength.

Within the Agra fort enclosure, the *Ai'n* states that Akbar built 'upwards of five hundred edifices of red stone in the fine styles of Bengal and Gujarat'. Many of these structures were demolished later to make room for Shah Jahan's white marble pavilions, but enough remain to show the general character of these early Mughul palaces. They now consist of a group of buildings in the southeast corner of the fort, but originally they extended along the greater portion of the east wall overlooking the river. Apparently built and added at different periods during the long course of Akbar's reign, that known as the Akbari Mahal, with the Bangali bastion, is the earliest, as it is contemporary with the fort-wall of which it forms the upper part. At a later date, probably towards the end of the sixteenth century, considerable alterations appear to have taken place, and a section of the outer wall was dismantled in order to accommodate another palace, that of the Jahangiri Mahal, intended as a residence for the heir apparent and his family. Both palaces, however, are designed on the usual plan of a central square courtyard, with ranges of double-storeyed rooms on each of the four sides. They are almost entirely of red sandstone, with insertions of white marble on the exterior, and the principle of construction is the 'beam and bracket', the arch being sparingly used and then only in its ornamental capacity. There is little difference in the character of these two palaces, the older one being perhaps a little coarser and bolder in its treatment compared with the finer and more ornate handiwork on the Jahangiri Mahal. In the latter, one is struck by the elaborate character of the carved stone brackets which support the stone beams, wide eaves and flat ceilings in all parts of the building. In no other structure, except in a range of similar pavilions in the fort at Lahore being built about the same time, has such ingenuity been shown in the design of these supporting brackets, or have

they been applied in such a profusion. Apart from this feature, which, as a constructional motif, is itself of wooden origin, several of the details in this palace suggest a derivation from a phase of wooden architecture which may have preceded it. This is particularly noticeable in the treatment of the portico of the eastern façade, and also in the use of struts in the northern hall. In the former the two slender pillars with their expanding caps and bases and the arrangement of brackets above would be much more appropriate in wood than in stone; as regards the latter, the struts supporting the ceiling are obviously copies of wooden beams; in fact, the whole design of this hall resembles the wooden interior of some of the large houses in the city of Lahore of a slightly earlier date. That those who worked under Akbar borrowed readily and from a variety of sources is obvious. In the general character of the fort at Agra there is a resemblance to the fortress at Gwalior, with its palaces of Man Singh built early in the century, which cannot be accidental. The elephant gateway, the cupolas of Amar Singh's gateway, the palaces rising out of the fort-walls, the planning of these palaces, and also some of the carved details, all indicate that the Rajput citadel, which had moved Babur to admiration some forty years before, was used freely as a model by his more fortunately placed grandson.

Although Lahore was regarded as only the secondary capital of the empire, the fort that Akbar constructed there almost at the same time as that at Agra was conceived and carried out on practically the same grand scale. It may be remarked, however, that its layout generally indicates an advance on that of the more southerly capital, as it is rectangular in plan and the interior arrangements are more regularly aligned. [. . .]

It is characteristic of Akbar's almost insatiable passion for building, that even before the forts of Agra and Lahore were completed, he began to contemplate a scheme which eventually matured into the greatest of all his architectural projects. This was the construction of an entirely new capital city on an elevated site at Fatehpur Sikri, some twenty-six miles distant from Agra. No sooner was the idea formed than plans were prepared, artisans summoned from all parts of his dominions, and the work pushed on with such lightning rapidity that not only its splendour but the almost magical speed with which it was completed was a matter of contemporary comment. Jahangir writes that 'in the course of fourteen or fifteen years that hill, full of wild beasts, became a city containing all kinds of gardens and buildings, and lofty elegant edifices and pleasant places attractive to the heart',[4] while Father Monserrate, after giving details of the extraordinary expedition with which certain buildings

were finished, remarks that 'all the material, prepared according to specification, was brought complete and ready to the place where it was to be used'[5] reminding him of the scriptural precedent 'and the house, when it was in building, was built of stone made ready before it was brought thither: so that there was neither hammer nor axe nor any tool of iron heard in the house, while it was in building'.[6] Such, however, was the common practice of masons in the east. In India, although at certain times and in some localities the carving was apparently done on the walls, as a rule the stones were separately prepared, carved into pattern and then conveyed as a finished product to the building to be placed in position. The latter was evidently the system in vogue in Mughul times. At Akbar's new capital the method would present no difficulties, as there was an unlimited supply of good building material to be quarried on the site itself. In the words of the *Ai'n*: 'Red sandstone . . . is obtainable in the hills of Fathpur Sikri, His Majesty's residence, and may be broken from the rock at any length or breadth. Clever workmen chisel it so skilfully as no turner could do with wood.' Most of the labour was done in a kind of open-air workshop on a level space towards the western limits of the ridge. Here the masons erected for their own worship a mosque called the 'Stone-cutters Masjid' which is probably one of the earliest buildings on the site.

The ridge at Fathpur Sikri is a rocky eminence running northeast and southwest. Along and astride it was marked out a rough rectangle approximately two miles long and one mile broad, three sides of which were walled, while the remaining side was protected by a large artificial lake. The encircling walls were not very substantially built, being merely a symbol of demarcation and of little military value. In an emergency Akbar and his court could readily fall back on the strong fortress of Agra, to which it was connected by a broad thoroughfare, the conditions being somewhat similar to those of Windsor Palace and its relation to the Tower of London. Nine gates were constructed, but only four of these were of importance, while there was the usual 'Elephant Gate' or *Hathi Pol*, but this was a ceremonial gateway to the palace precincts and not in the city walls. The principal entrance was by the Agra Gate which façed that city, and from this the main bifurcated, one branch leading up to the palaces, the other continuing lower down the hill to the suburb of Fathpur.

The chief buildings of the capital occupy a comparatively small portion of the centre of the walled area, the crest of the ridge having been levelled into an irregular flat space about half a mile long and an eighth

of a mile broad. On this plateau the palaces and other civil edifices form one compact group, with the Jami' Masjid standing slightly detached, a separate road leads to each. Around and at lower levels were various supplementary structures such as *sarais*, baths, wells, offices, the treasury, and the mint. All the principal buildings on the ridge are not aligned parallel but diagonally to the rectangle of the encircling walls, facing accordingly east and west. This plan was necessary in order to ensure regularity, and to be in accordance with the fixed orientation of the Jami' Masjid, the largest and most important building on the site. The main road from the Agra Gate led directly into the large courtyard of the Diwan-i-'Am, as this was a semi-public enclosure to which most visitors to the capital would have the right of admittance. But the far wall of the Diwan-i-'Am, with its extension, marks the dividing line between the public and private portions of the palace precincts. Behind this are the royal palaces, residences, retiring rooms and offices of state, each within its own courtyard or enclosure, regularly disposed but apparently on no particular plan except that from Akbar's own apartments access could readily be obtained to all parts.

Although all the buildings at Fathpur Sikri conform to the general style of architecture which was developed during Akbar's reign, the Jami' Masjid, on account of the special purposes for which it was intended, and the traditional character which it was required to maintain, was treated in a somewhat different manner from the other edifices. The latter, comprising the secular or civil buildings, such as palaces, residences, state compartments [*sic*], and offices, are as a whole similar to those already referred to in the forts of Agra and Lahore. They are mainly trabeated in their construction and the indigenous methods and motives prevailed. But a few of them are even more 'Hindu' than those already described, and it is quite clear that some of their decorative features are copies of those seen in the temples of the Jains and Hindus. Akbar's tolerance and his sympathies with Indian culture as a whole partly accounted for these unorthodox intrusions, but there is another explanation. The magnitude of the undertaking, and the haste with which it was accomplished, necessitated an immense staff of workmen drawn from all possible sources. Numbers were drafted from distant provinces and it is clear that in their personnel the Hindu element predominated. Each group brought with it the characteristics of its own particular school, and more than one of these can be distinguished by certain unmistakable motifs and methods. As in the production of the secular buildings racial and religious considerations were of little consequence; they were employed on these, as their style plainly shows. On the other hand the local craftsmen, having for generations been more closely concerned with Islamic usage, were concentrated on the production of the great mosque.

Most important of the residential buildings is that known as Jodh Bai's Palace, one of the first structures to be erected, and one in which the Hindu influence is mainly in evidence. Like many large dwellings in the east, particularly those in contact with Islam, it is planned with the object of ensuring privacy and protection. Its double-storeyed rooms face inward onto a quadrangle, their continuous rear walls acting as a high screen all round. The lower storey of its exterior walls is almost forbiddingly plain, but, above, balcony windows project near the angles, and there is a handsome gateway on the east side also decorated with balconies, while kiosks rise over its parapet. Over the high walls appear the gabled roofs of the interior apartments, bright with coloured tiles, and at each corner is a low-pitched dome. The regularity of its exterior is broken on one side by an annex[e] for baths and service purposes, and on the opposite side a double-storeyed pavilion is attached called the *Hawa Khana* or 'House of Air'. The design of the entrance is characteristic. With a porter's lodge at one side, the shallow arched porch leads into a vestibule for the accommodation of an inner guard. The doorway on the opposite side, giving admission to the interior courtyard, is not in line but to one side, thus entirely preventing anyone outside from seeing within. Around the paved courtyard of the interior of the palace is carried a one-storeyed corridor, but imposed in the middle of each side is a substantial building two storeys in height consisting of a pillared portico in front and an arrangement of rooms in the rear. In each corner is also a double-storeyed structure surmounted by the low dome mentioned above. From the courtyard the appearance of the whole building is remarkable for its two rows of wide eaves which cast immense shadows over every frontage, and also for the shape and variety of the angular roofs which, with the parapets, still retain traces of a considerable amount of colour.

The two-storeyed buildings in the centre of each side are commodious apartments, each more or less a self-contained suite, but connected with the corner rooms and also with one another by the continuous corridor below. They are sufficiently large to serve a variety of purposes, some of them being evidently reception rooms, while others are dining rooms or retiring rooms and for promenades. More than one of the chambers of the upper storey is covered by a waggon-vaulted roof of stone. But it is when some of the carved features inside these rooms are examined that special interest is aroused. There are pillars, balconies, grilles, niches, and such details as volutes and the 'chain and bell', all copied

exactly from these well-known elements in the temple architecture of western India, notably Gujarat. So marked is this influence that there are good reasons for assuming that the task of constructing Jodh Bai's Palace was entrusted to the descendants of the craftsmen who built the temples at Mount Abu, Somnath, Modhera, and other famous shrines of those parts.

There are two other residences at Fathpur Sikri, besides the palace of Jodh Bai, presumed to have been built for the accommodation of Akbar's queens. Neither of these, however, equals in size and importance that of the Rajput princess, as they are little more than pavilions, but they are structures which in style and decorative treatment have considerable individuality. It has been shown that Jodh Bai's Palace was apparently the handiwork of one group of artisans, and there seems little doubt that the construction of each of the other queen's houses was assigned to similar groups of craftsmen to produce these after their own particular fashion. The one known as Miriam's House is almost too slight to have any distinctive architectural character, as it consists merely of a suite of rooms, a portico, and a kiosk on its roof. But on the other hand the interior was ornamented with pictures, scenes painted on the walls of various subjects drawn with great vigour. Only traces of these have survived, but it is clear that several of the leading exponents of Akbar's school of miniature painting were engaged on this mural decoration. The other house, that of the 'Turkish Sultana', is also structurally of no special significance, except that it is a pleasing little retiring room surrounded by a piazza, but the manner in which this is embellished and the nature of its carving calls for remark. Every portion of its surface inside and out is chiselled in a variety of designs and patterns, some of the usual conventional order common to Islamic art in India, while others are based on natural foliage, such as the vine and the pomegranate. A series of panels forming the dado of the interior depicts with remarkable spirit and grace 'jungle' scenes of trees and animals in a very specialised plastic style. All the designs are notable for the refinement of their treatment, and are executed in a delicate method of low relief, the only fault of which is that it is almost timid in its handling. The whole of this structure seems to have been produced by a group of craftsmen of marked artistic and creative ability, but the constrained manipulation of their material shows that stone had not always been their metier, and the probability is that they were originally wood-workers from Lahore.

In addition to these apartments of the queens there are two other secular buildings of outstanding character. One of these is Birbal's house, and the other the Diwan-i-Khass. Although each was designed for a very different purpose, the exteriors of both are of the style which defines the majority of the buildings of Fathpur Sikri. Birbal's house attracts the eye on account of the exuberance of its carved decoration, both inside and out, every surface displaying sculptured patterns, while the brackets of its exterior are amazingly ornate. Its roof is surmounted by two domes, in the construction of which a hollow space has been left between the inner and outer shells, showing that the principle of the double dome, even in its low-pitched form, was already being put into practice. The other structure, the Diwan-i-Khass, a hall provided for audiences of a special nature, has a comparatively plain exterior, but the arrangements inside are unique. Externally the building appears to be in two storeys, but the interior is really one lofty room. This is divided at about half its height by a gallery on brackets continued around its four sides, with other narrow hanging galleries thrown diagonally from corner to corner. Where the diagonal galleries meet in the centre of the room, a circular platform has been inserted, the entire construction being supported on an immense cluster of brackets forming the capital of a column which rests on the ground. The intention of this complicated contrivance was to enable the emperor to sit on a throne in the central platform and hear disputants from all sides, the whole arrangement symbolising his 'dominion over the four quarters'. This freakish notion the designer has worked out to the best of his ability, and the main feature, the central pillar with its huge circular array of brackets, in spite of its top-heavy appearance, has considerable dignity of effect. Akbar's ideas were usually sound, and his good taste almost instinctive, but occasionally, as in this instance, his desire for the bizarre prevailed. A similar weakness is observable in two other structures near the Diwan-i-Khass; one, a square canopy standing on a platform, and known as the 'Astrologer's Seat', has excessively large voluted struts peculiar to the Jain temples of western India. The other is a tall pyramidal structure in five storeys known as the Panch Mahal, a somewhat fantastic erection with the many pillars comprising one of its stages elaborately carved, each in a wholly different design.

But undoubtedly the most imposing building at Akbar's capital and the one on which the highest architectural skill was concentrated is the Jami' Masjid. Additional interest attaches to this structure because it was the first of those grand congregational mosques which adorn the chief cities of the Mughuls and for which it furnished the original model. The main façade forming the exterior of the sanctuary hall may not be

equal to that of the Jami' Masjid at Delhi, the largest and finest of its type, but the planning and arrangements of its interior aisles are far superior. The difference in the architectural treatment of the mosque at Fathpur Sikri compared with that of the civil buildings just described is notable. The two principal divergences are that whereas the construction of the latter is trabeated, on the other hand the mosque is mainly arcuate, and secondly, in place of carving, inlaid marble and plaster relief in colour were freely used. When completed in AD 1571 it displayed a perfectly regular plan, symmetrical in all its parts with the courtyard entered by gateways, one in the middle of three of the sides. Shortly afterwards, however, three additions were made, which although they have increased its interest, have tended to disturb the balance of the composition as a whole. The first of these was the tomb of Salim Chishti, the saint whose long residence on the site is commemorated by a very chaste marble structure placed on the north side of the quadrangle. A little later the south gateway was replaced by the magnificent portal known as the Buland Darwaza, a triumphal archway to commemorate Akbar's conquest of Gujarat. In AD 1612 a further encroachment was made on the north side of the courtyard by the inclusion of Islam Khan's large tomb, causing the entrance-gateway to the mosque on that side to be dismantled and closed. [. . .]

The mosque is contained within a high wall crowned by a crenellated parapet and enclosing a rectangle of 438 feet by 515 feet. Against the inside of this retaining wall is a continuous range of arcaded cloisters ornamented above by a series of small kiosks. The only original doorway to the courtyard now remaining is the Badshahi, or 'King's Gate', on the east side, the private entrance of the emperor, a structure according so perfectly with its surroundings that its excellent proportions and carefully adjusted parts may quite readily pass unnoticed. But the most important feature of the whole conception is the sanctuary hall on the opposite side of the quadrangle. Hitherto the Indian builders had generally considered it sufficient merely to enlarge and amplify the western aspect of the mosque enclosure in order to make a hall suitable for its purpose. At Fathpur Sikri the plan was adopted of designing the sanctuary in the form of a spacious self-contained place of worship, a separate structure provided with a nave, aisles and chapels so combined as to produce a unity in itself. The façade of this fine prayer hall resolves itself into two parts consisting of a large arched portico in the centre, with arcaded wings extending on each side. Above this façade rise three domes, of the flattened 'Lodi' type, but considerably stilted in order to

add to their height; the central one roofs the principal prayer chamber, corresponding to the nave, while the others are over the side chapels. As usual there is the unavoidable masking of the main dome owing to the height of the parapet over the portico, but this is a failing in nearly all Indian mosque elevations, the heritage of the *maqsura* or arched screen prescribed by ancient tradition. The qualities of simplicity and largeness which distinguish the exterior of this sanctuary are maintained in the treatment of the interior. This resolves itself into several major compartments, the most important of which is the central hall or nave, divided off from the wings by solid walls but communicating with them by side arches. This central hall, approached by archways from the portico, is the principal prayer chamber, and consists of a square room with a high-domed roof. On each side of this central compartment are the other main divisions of the interior comprising the wings. These wings are not enclosed by walls as is the central hall, but open onto the quadrangle by means of an arcaded piazza, behind which are the pillared aisles. Within these aisles are the two side chapels, the position of each being indicated exteriorly by the smaller domes. Occupying an upper storey at the extreme ends of the wings are chapels for the *zanana*. Much of the effective appearance of the interior is obtained by the long receding vistas of the aisles, the contrast of the pillars and their brackets with the graceful pointed archways, the inlaid geometrical patterns which decorate the piers, and the brilliantly painted ornament on the *miḥrāb* walls. The *miḥrāb*s themselves, twenty-one in number, are inferior in design to those of the Qil'a-i-Kuhna Masjid, produced nearly twenty-five years before, but they endeavour to vie with these in the diversity and richness of their painted surfaces. An unorthodox motive is introduced into one of these prayer niches in the form of a border containing a grapevine.

In spite of the fine symmetrical effect of the sanctuary façade the eye of the spectator as he enters the enclosure naturally turns to the southern entrance of the mosque formed by the Buland Darwaza, the immense bulk of which throws its shadow all day long across the courtyard. This is a superb structure, and thoroughly characteristic of the period. Each art culture has usually one form of utterance in which it finds the readiest means of expression, and with the Mughuls this was the entrance gateway. To the gardens of their tombs, the quadrangles of their mosques, the walls of their forts, the courtyards of their palaces, the entrance gateway was always a prominent feature, excellently proportioned in itself and at the same time in complete harmony with its surroundings. These

gateways were essentially an Islamic heritage derived from the earlier Day of the Faith when life was mainly spent in fortresses of which the most vital parts were the entrances. Experience in designing these in time of war bore fruit in times of peace. Under the Mughuls its culmination is seen in this magnificent triumphal archway and entrance-gateway combined. Seen from any point of view, but specially from a distance, its great size and commanding height present a most imposing appearance. Its measurements are significant. From the platform in front of the doorway to the finial at the top is 134 feet, but including the flight of steps leading up to it, its total height is 176 feet. Across the main front it measures 130 feet, while its greatest depth from front to back is 123 feet. Such an unpremeditated addition to the mosque presented certain constructional difficulties on this side of the courtyard, as the ridge slopes away sharply, thus necessitating an unusually long and steep flight of steps at its foot. Its approach and outlook also emphasise the fact that the whole project was an afterthought, as it overlooks the *hammam*, beyond which are the quarters of the servants. And further, its boldly projecting façade, towering height and almost aggressive strength would be more appropriate to a citadel than the peaceful and sacred precincts of a mosque. Yet it fulfils its double purpose as a triumphal arch and a mosque gateway combined in a remarkably effective manner. The method by which this monumental edifice is gradually diminished in its parts until it is finally reduced to an ordinary-sized doorway, as was its secondary intention, has been well described by Fergusson,[6] who correctly attributes the result to long experience in working on right principles.

Few buildings could furnish a more marked contrast to the one referred to above than the tomb of Salim Chishti, situated only a short distance away on the opposite side of the courtyard. Each structure makes a separate appeal, the gateway in view of its size and majestic proportions, the tomb by its casket-like appearance and the richness and delicacy of its detail. The date of the latter is AD 1571, but as it is constructed wholly of white marble it appears to belong to a later period. What, however, has happened is that the original tomb was built of sandstone, as were all the buildings of this time, but subsequent devotees, feeling that the shrine of their saint should be made of something more precious than common stone, converted it into its present state by substituting marble for certain parts, and covering others over with thin slabs of the same material like a veneer. It may therefore be described as an architectural palimpsest. But although the material has been changed its design cannot be far different from what it was when first erected. In the course of conversion the dome may have lost its original contour through being covered with slabs of marble, while in the process of copying the pillars and perforated screens some extra play of fancy may have been indulged in. The plan and general arrangements of the tomb building call for no special remark; there is the square-domed cenotaph chamber surrounded by a verandah and with a projecting pillared portico. Painted patterns cover the walls of the interior, semi-precious stones of artistic colours decorate the floors, and the pierced screens of the verandah are of exceptionally fine workmanship. A wooden canopy over the sarcophagus is inlaid with arabesques in ebony and mother-of-pearl of exquisite design, probably executed by artisans of the northern Punjab noted for their skilled inlay. What, however, distinguishes this building from all others is the character of its pillars and pilasters, and, more particularly, the style of the large and elaborate struts which support the wide-spreading eaves. The shape of the pillars themselves is unusual; a zigzag pattern covers their shafts, and their capitals recall those of the stalactite order. But the convoluted struts with perforated ornament between the scrolls springing from half-way down their shafts and carried right up to a bracket under the eaves are unique. Based on somewhat similar supports in the temples of Gujarat, the Mughul craftsmen elaborated this idea to the extent here seen. Much of the marble work is, however, attributed to the early years of Jahangir's reign, when the style was losing its quality of direct simplicity, an appearance which in the West would be regarded as a form of the baroque.

The methods perfected by the builders of Akbar's time had one comparatively small but interesting repercussion. It has been shown that the early Mughul buildings owed not a little of their character to the indigenous temple architecture, elements from which were freely borrowed. To find therefore at the sacred Hindu retreat of Brindaban near Muttra [Mathura] several temples assimilating in their turn much of the contemporary style of the Mughuls is some measure of its vigorous nature. Of these temples that of Govind Deo erected in AD 1590 is the most notable, and testifies not only to its adaptability to other purposes but is also a tribute to the versatility of the Indian masons who built it. There is a wide difference between the needs of a Mughul palace or mosque and those of a Hindu temple, but any difficulties this interchange presented were readily overcome. The temple was never quite finished, but the plan and intention of its designers can be understood from what now appears. As far as the exterior is concerned this suggests certain aspects of the architecture of western India, the exuberance common to that

style, however, having been restrained by its contact with the more sober style of the Mughuls; it shows a sense of refinement and an appreciation of the value of plain surfaces not often seen in temple design. The contrast between the horizontal lines of its richly moulded buttresses and the perpendicular effect of the pillared openings between has been well maintained. A still more advanced treatment is observable in the interior as its cruciform plan, 'Tudor' arched transepts, and groined and vaulted hall would not be out of place in a Gothic church. Here the builders seem to have gone farther afield for inspiration, as the principle of the intersecting arches supporting the domed roof is allied to that employed in the provincial style of Bijapur, while the roofing of the aisles was apparently borrowed from the transepts of the Jami' Masjid at Jaunpur, where the application of the waggon vault and groin had been already mastered. But the pillared cloisters in two storeys with their lintels and carved brackets are reminiscent of the palaces of Fathpur Sikri. There is much that is original in the temples of Brindaban, but in few other Hindu buildings is the influence of the prevailing style of the Muslims more obvious than in the temple of Govind Deo.

Yet the secular architecture also of the Hindus did not remain unaffected by the building activities of Akbar and his successors, as is shown by several palaces and other important structures erected in Rajputana and Malwa about this time. Chief among these are the royal residence and other state buildings in the romantic city of Amber which were begun about AD 1600, and the palace of Bikaner, also begun towards the end of the sixteenth century. These were followed by the palace-fortresses of Jodhpur and Orchha, with the stately palace of Datia, all dating from the early part of the seventeenth century, and finally by the palace at Dig, commenced about AD 1725. All these palatial retreats of the Rajput princes show by their style an association with the building art as evolved by the Mughuls, but with elaborations of their own. Apart from the richness of their decoration, they display a fancifulness expressive of the imaginative Hindu mind, together with evidence of a survival of the ancient craft traditions of the country. This Mughul foundation breaking out into Hindu exuberance is well illustrated in its most florid aspect by the Durbar buildings of Amber, and perhaps with slightly more restraint by the fluted pavilions of the citadel at Jodhpur. It is not difficult to see in such buildings how the stone structures of the early Mughuls by the addition of engrailed arches, glass mosaics, painted plaster, gilded gesso and sgraffito were adapted to the more colourful requirements of the Hindu princes.

After the death of Akbar in AD 1605 there was a pause in the building

operations of the Mughuls. The strenuous and unceasing activity of this great building monarch was followed by a period of partial inertia. His successor's chief interests lay in fields other than that of architecture. Under Jahangir the art of miniature painting flourished exceedingly, and owing to his patronage it reached great heights. But perhaps this emperor's principal delight was in the laying out of large formal gardens, the romantic beauty of which has contributed not a little to the aesthetic reputation of the Mughul dynasty. Babur had already introduced this type of garden in India by devising the Ram Bagh at Agra, and Akbar had a similar large enclosure planted at Sikandra, where afterwards he planned his tomb. Through Jahangir's love of nature, inherited from his progenitor Babur, the Mughul garden was brought to perfection, and at all places where this emperor sojourned for any length of time one of these pleasaunces was generally prepared. Some of his courtiers also built retreats of this kind, as for instance Asaf Khan's Nishat Bagh in Kashmir, and, later, the emperor Shah Jahan had a very large one constructed at Shalimar near Lahore. The Mughul garden is a conventional arrangement of squares, usually in the form of terraces placed on a slope for the easy distribution of water which is an essential part of the scheme. Each terrace is divided into four lesser squares in order to conform to the traditional plan of what is known as the *char bagh* or fourfold plot, the whole being a combination of rectangles and straight lines, no curved paths or even circular parterres being found. Artificial pools with numerous fountains play an important part in the composition, while in an inconspicuous spot a bath or *hammam* is sometimes introduced. Pavilions occupy central positions, and the flagged causeways are shaded by avenues of trees. One of the loveliest of these gardens is the Shalimar Bagh in Kashmir constructed by Jahangir, which, however, owes not a little of its charm to the wonderful situation with a background of mountains and a view over the crystal waters of the Dal lake. Immense *chinar* trees grace its walks and green swards, water ripples and cascades down its sloping channels, lotus-bud fountains dance in the sunshine, and beds of flowers give colour and fragrance to the whole.

It was in the production of scenes of this kind that the emperor Jahangir excelled, but nevertheless his predecessor had given such an impetus to the art of significant building that in spite of any indifference he may have shown towards the subject, it was carried along by its own momentum. The incentive was in a manner supplied by a solemn obligation laid upon Jahangir, namely the construction of his august father's mausoleum. Whether Akbar or his son was responsible for the design of this structure is not clear, but that practically the whole of the actual building

was carried out in Jahangir's reign is now fairly well established. The site, which was on a garden prepared by Akbar at Sikandra near Agra, and also very probably some idea of the design of the tomb, were settled before his death. [. . .] Under Jahangir's spasmodic supervision, which on occasion looked like undue interference, and with his dilettante temperament, the final state of the structure is perhaps largely due. Jahangir had a trained eye for a picture, but not a mind that could understand the largeness and breadth required for architectural effect. [. . .]

Spatial effect is the keynote of Akbar's tomb, and the great square garden with which it is surrounded emphasises this quality. This garden, itself an important accessory to the composition as a whole, is a formal arrangement of squares, but much of its original intention is now lost. It was divided into four quarters by broad paved causeways raised 8 feet above the surrounding parterres. The sweep of each of these wide approaches is interrupted in the middle by being expanded into a terrace containing an ornamental tank and fountain. Aqueducts traverse these causeways, and in convenient places flights of steps lead down to flower beds at a lower level. A fine gateway is introduced into the centre of each side of the high embattled wall enclosing the whole garden area, that on the south side and the largest of all forming the main entrance, the others being false doorways added to ensure symmetry. Each of these portals is a minor monument in itself, as they are charmingly proportioned and the variety of their carved, painted and inlaid decoration makes each one a work of art. Specially does this apply to the main entrance, which, apart from its elegant appearance and the boldness of the arabesques decorating its surfaces, is distinguished by the addition of a tall white marble minaret rising from each of its four corners. The presence of these minarets marks a notable step in the development of Islamic architecture in Hindustan, as in no other instance does this characteristic feature appear in upper India since the erection of the Qutb Minar four centuries previously. And here it emerges, not as an experiment, but fully developed with all its parts in perfect harmony and in exact and final form.

The mausoleum building itself is a huge structure occupying a square of 340 feet side, and consists of five terraces diminishing as they ascend, thus approximating a low truncated pyramid. Muslim tombs in India are invariably designed on the plan of a crypt in which the body is buried, and a building above containing the tomb-chamber with its cenotaph. As might be expected in view of Akbar's unconventional nature, his tomb is a departure from this orthodox domed hall, almost

on ground level, which takes the place of crypt and tomb-chamber combined. Around this domed hall was built the lowest terrace, a stupendous mass of masonry 30 feet high, and almost solid except for a range of cloisters continued all round its outer sides. Externally, as part of the façade, these outer sides of the terrace are arcaded, and in the centre of each is inserted a large portico with a deeply recessed archway. The portico on the south side forms the entrance to the domed mortuary chamber, which is reached by a long and slightly descending corridor, light being admitted through clerestory windows by means of shafts from above. The roof of this terrace provides a wide platform, in the centre of which rises the superstructure comprising the four remaining storeys. Three of these storeys consist of superimposed tiers of pillared arcades and kiosks built mainly of red sandstone. The arcades lead to ranges of rooms in the interior, but they also act as a façade to the masonry which encloses the dome of the mortuary chamber below. Supported on these rows of sandstone arcades is the topmost storey of white marble, its perforated lattices forming the cloisters of an open court with a cenotaph in the centre; each corner of this storey is surmounted by a slender marble kiosk.

Although there is much that calls for admiration in this vast structure, particularly in the treatment of its final storey, which for delicacy and finish is unsurpassed in any other Mughul monument, as a whole it is disappointing. It is unimpressive because it lacks the quality of mass which is one of the principles of beauty, and of coherence which is the basis of style. The lowest terrace is a noble conception, substantial yet not heavy, a suitable foundation inviting an imposing superstructure to be erected on its broad platform. But the opportunity was not taken. Instead of a solid and dignified building above, consistent with this ponderous base, there arises a light and almost frivolous array of arcades and kiosks, more appropriate in a summer palace than forming the principal part of a royal mausoleum. [. . .]

Much the same criticism applies to Jahangir's own mausoleum built at Shahdara near Lahore some twenty years later, which is conceived on somewhat similar lines. But it lacks even the lofty effect of the earlier example, as there is no superstructure, the body of the building consisting of a single storey in the form of a square terrace 22 feet high. It is true some appearance of height is obtained by a handsome minaret rising from each corner, and there was originally a marble pavilion placed in the middle of the platform above which, when *in situ*, would have offered a central point of interest. Now shorn of this feature, which was removed

during the Sikh supremacy, the whole composition is singularly ineffective. Efforts were made to improve its appearance by the lavish application of inlaid marble, glazed tiles, and painted patterns, some of which are remarkably good examples of mural decoration, but no amount of embellishment of this nature can redeem its obvious architectural defects. As a contrast to the somewhat affected grandeur of both these royal mausoleums, and also as a proof that probably under less exacting conditions the craftsmen of the time were capable of first-rate workmanship, are two tombs erected towards the end of Jahangir's reign, one at Delhi and the other at Agra. Apart from the high character of their design both of these structures mark a definite stage in the evolution of the style and forecast plainly its subsequent attainments. The tomb of Khan Khanan at Delhi, a nobleman who died in AD 1627, shows a return to the Persian mode initiated in the mausoleum of Humayun some sixty years before. Unfortunately in the eighteenth century it was stripped of much of its marble covering, so that now it is little more than a shell, but even in a mutilated state it is possible to see that in many of its particulars it is a copy on a smaller scale of the emperor's tomb nearby. In one notable respect it differs, however, from its prototype, in that the wings of the façade have been simplified so that the plan, instead of being octagonal, is a plain square; in all other directions both designs are almost identical. Each stands on a terrace with seventeen arched recesses on each side. The mausoleum building which rises above the platform formed by the terrace has much the same distribution of parts in both examples; there is the large central arched recess, the arrangement of kiosks above, and the double Timurid dome over all. The tomb of Khan Khanan therefore indicates that the Persian attribution even after this considerable passage of time was still definitely alive.

The other tomb of this date, that enshrining the remains of I'timad-ud daula at Agra, is a very different conception. It was built by this high official's daughter Nur Mahal, the brilliant consort of Jahangir, who, it should be added, was also responsible for the construction of that emperor's mausoleum at Shahdara. No two buildings could be more dissimilar, and the wide divergence of style seems to show that while on the one hand the royal tomb of Shahdara was no doubt originally planned by Jahangir himself, the tomb at Agra bears in every part of it the imprint of the refined feminism of this remarkable queen. There is no other building like it in the entire range of Mughul architecture, the delicacy of treatment and the chaste quality of its decoration placing it in a class by itself. It is a comparatively small structure, the tomb building measures only 69 feet wide, and as it is constructed in the purest white marble

with much of its ornamentation of inlaid semi-precious stones it conveys the impression of a rich article of jewellery magnified into architecture. Situated in the middle of a square enclosure, recalling in some respects the pleasant repose of a cloister garth, this brilliant little edifice stands out in strong contrast to its surroundings of dark cypress trees and red sandstone gateways. The latter in themselves are charmingly designed entrances, notably that on the western side by which the mausoleum is approached from the river. All these essential appendages are in the best of taste and skilfully subordinated to the marble edifice enthroned in the centre amidst parterres, tanks, and fountains. The mausoleum consists of a square lower storey with a gracefully proportioned turret like a dwarf minaret thrown out from each corner, while above a smaller second storey rises in the form of a traceried pavilion; their interior is a simple arrangement of a central chamber containing the cenotaphs, surrounded by connected rooms corresponding to an enclosed verandah. Light everywhere is obtained through perforated screens, a 'gossamer of fretted grilles' which give an exquisite texture to all the openings. And over the whole, delicately modifying the dazzling effect of the white marble, is laid with deft fingers a diaphanous veil of coloured inlay in patterns of bewildering diversity. Whether regarded as an architectural composition of matchless refinement, as an example of applied art displaying rare craftsmanship, or as an artistic symbol of passionate filial devotion, the tomb of I'timad-ud-daula expresses in every part of it the high aesthetic ideals that prevailed among the Mughuls at the time. But this building in addition to its intrinsic beauty has another interest. It is the first structure of the Mughuls to be composed entirely of white marble, and also the first in which that form of inlaid decoration known as *pietra dura* makes its appearance. In its technical aspect therefore it denotes a turning-point in the evolution of the building art, marking the change from the sandstone construction and *opus sectile* ornamentation which satisfied the simpler taste of Akbar and Jahangir to the sumptuous white marble pavilions and *pietra dura* of Shah Jahan.

Augustus's boast that he found Rome of brick and left it of marble has its counterpart in the building productions of Shah Jahan, who found the Mughul cities of sandstone and left them of marble. In the forts of Agra and Lahore, and at other places besides, this emperor swept away many of the sandstone structures of his predecessors and in their place erected marble palaces. The quarries of Makrana in Rajputana provided unlimited supplies of this finely textured building material, so that pavilions, courts, and columned halls were all constructed in pure white marble; when for various reasons this was not made use of, the stone which

took its place was façed with stucco, the plastered surfaces being polished to an egg-shell whiteness in keeping with the marble masonry. Such a definite change of material naturally implied a corresponding change in architectural treatment. The building art acquired a new sensibility. Instead of the rectangular character of the previous period there arose the curved line and flowing rhythm of the style of Shah Jahan, while the chisel of the stone carver was replaced by the finer instruments of the marble cutter and polisher. No longer was effect dependent on bold string-courses and intricate carving; the chaste texture of the marble itself was sufficient to give quality to any building, and any relief decoration required to be of the most refined order and sparingly applied. Variety of surface was obtained by panels in correct proportions outlined by mouldings fine and rare in their contours. Most of the ornamentation was, however, of a much more subtle nature, colour and gilding being introduced, while patterns inlaid in semi-precious stones the *pietra dura* already mentioned, were a special feature. But perhaps the most striking innovation was the change in the shape of the arch, which in almost all buildings of Shah Jahan's reign is foliated or cusped in its outlines, so that white marble arcades of engrailed arches became the distinguishing characteristic of the period. During the governance of this emperor, Mughul architecture undoubtedly found its golden age. Of a highly artistic nature he satisfied his desires by the building of sumptuous edifices of all kinds, not waiting to complete one piece of self-expression before committing himself to another. All other forms of culture not dependent on the mason's art, such as literature, the school of miniature painting encouraged by Akbar and Jahangir, and similar intellectual pursuits, were disregarded, his entire patronage being concentrated on building. And it was building of the most sensuous, even voluptuous order. The productions of his predecessors were looked upon as almost barbaric, the court chronicler comparing certain of the 'abominations' with the masterpieces of 'this august reign, when . . . lovely things reached the zenith of perfection'.[7] At Agra and Lahore the palaces within the forts were largely reconstructed, and all the cities of the Mughuls display examples of Shah Jahan's building predilections. In the fort at Agra the greatest changes are recorded, the whole of the structures north of the Jahangiri Mahal being dismantled and their places taken by marble edifices such as the Diwan-i-'Am, Diwan-i-Khass, the Khass Mahal, the Shish Mahal, the Musamman Burj, the Anguri Bagh, the Machhi Bhawan and the Moti Masjid. Details of all these alterations and additions are to be found in contemporary accounts written in the flowery language

of the time. But even the most ardent flatterer, trained in poetical analogies, could barely do justice to the surpassing beauty of some of these structures, which in spite of vicissitudes still hold their own as the most elegant of their kind. What could be more graceful than the hall of the Diwan-i-Khass with its series of double columns, or the Musamman Burj hanging like a fairy bower over the grim ramparts? Even these, however, are excelled by the peerless refinement of the Moti Masjid or 'Pearl Mosque', one of Shah Jahan's latest additions, as it was erected in AD 1654 when the art had attained its ripest state. Few religious edifices convey to the beholder a finer sense of purity than this chapel royal, which both on account of the flawless quality of its material, and the skilfully modulated disposition of its elements, represents the Mughul style at its zenith. The subordination and contrast of the entrance archway to the arcading of the sanctuary, the proportions and arrangement of the kiosks surmounting the cornices, and, notably, the subtle raising of the drum of the central dome in relation to those on each side, are a few only of the aspects of this structure which show in the most emphatic manner that the principles of balance and rhythm were by this time thoroughly appreciated by the Mughul builders.

[. . .] But the remodelling of the palaces of his forefathers did not satisfy the ardent building propensities of Shah Jahan, and accordingly in AD 1638 he began at Delhi the construction of an entirely new capital city of his own. Within its walls was to be included a large citadel or palace-fortress, the whole resting on the right bank of the Jumna. No regular plan seems to have been followed in working out this scheme, except that the city is roughly in the shape of a quadrant with the fortress at its apex overlooking the river. Two wide thoroughfares radiate from the main gates of the fortress to those in the city walls, and in the angle thus formed was placed the Jami' Masjid. As a contrast to this apparently casual layout of the walled city, the fort itself is a fairly orderly production in the shape of a parallelogram running north and south, with its corners chamfered and its northern side set at an angle to accommodate the existing fortress of Salimgarh which then became a barbican to the newer construction. The rectangle thus formed measures 1,600 feet by 3,200 feet and is enclosed by a formidable wall of the same type as that at Agra fort, but lacking its bold rugged strength; within this area the designers proceeded to plot out the interior arrangements under the personal supervision of the emperor himself. These arrangements included such essential requirements as three entrances consisting of a ceremonial, a private, and a river gateway; barracks for the guard, and accommodation

for the immense retinue attached to the court, together with shops and similar facilities for their personal convenience; an official portion for public and private durbars and affairs of state; a private enclosure to contain the palaces of the emperor and the residences of the royal family, with ornamental gardens attached; royal store rooms, regalia chambers, kitchens, horse and elephant stables, and other minor amenities appertaining to the imperial establishment. It is possible to see in the typical disposition of these requirements within the fortified area access of very early traditions, beginning with the palaces of the Assyrians, through those of Ecbatana, Susa, Persepolis, and, then further west, to the palace of Diocletian at Spalato, the resemblance of which to a Mughul palace-fort points to a common origin. The hypostyle hall of ancient Persia may well be the prototype of the Hall of Audience of the Mughuls, which in its turn suggests the Roman forum, for in all these rectangular pillared courts it was customary to transact judicial and political business. Turning again to the east in ancient India, the Mauryas copied at Pataliputra the columned halls of the Achaemenid Persians, and much of Dhammapala's description of Asoka's palace of the third century BC might apply to Shah Jahan's fortress at Delhi.

This magnificent royal residence, the last and finest of its kind, is unique because the whole of it was the conception of one mind, and carried out on a systematic and uniform plan. The scheme of this plan was an arrangement of rectangles, generally squares, no curved or oblique lines being introduced, in accordance with that quadrangular convention so deeply rooted in the Mughul mind. Immediately within the main gate a large space was divided off to contain the habitation of the palace retinue, who although residing within an enclosure assigned to them, would thus have easy access to both the city outside and the palace within. Through this service area a wide vaulted passage led directly from the main gate to the official portion, admission to which was obtained through the *naubat khana* or music gatehouse. This official portion, occupying a large rectangle in the centre of the fort, consisted of an arcaded courtyard with the columned hall of the Diwan-i-Am at the far side, where affairs of an official nature were administered. Around this central enclosure the entire area remaining was reserved for the accommodation and personal use of the royal household, including also the Diwan-i-Khass where private audiences were held. One half of this private part was occupied by the residences and living rooms of the emperor's family, while the corresponding space on the other side was divided up into a series of formal gardens. And along the whole length

of the retaining wall overlooking the river was aligned that range of marble pavilions and palaces each one more chaste than the other, proving by their combined beauty the truth of the couplet with which one of them is inscribed, that 'If there is a paradise on earth, it is this, it is this, it is this'.

Although there is much that is very fine in the external appearance of this fortress as a whole with its steep insurmountable defences and strong but elegantly designed gateways, the highest skill of its architects was undoubtedly expended on the design, construction and decorative treatment of this range of royal palaces, together with the Diwan-i-Am. Each of the palaces on its side looking into the fort was fronted by a garden divided into parterres by watercourses with an ornamental fountain in the middle, while on their outer side they crowned the sandstone ramparts with a succession of turrets, kiosks, gilt domes, hanging balconies, oriel windows, arcades, and perforated screens, which if not exactly orderly in their arrangement, were remarkably picturesque and breathed the very spirit of romance. Along this wall there were something like twelve separate pavilions, all connected with one another and each designed for a different purpose and bearing a distinctive name, such as the Moti Mahal or 'Pearl Palace', the Hira Mahal or 'Diamond Palace', and the Rang Mahal or 'Painted Palace'. The style of each is much the same, although there is a pleasing variety of plan, each consisting of a single-storeyed hall usually open on all sides, divided into bays by massive piers and the roof supported by foliated arches. Above are flat coffered ceilings at one time plated with silver or gilt, and the piers, walls and all interior surfaces are decorated either with inlay, low relief carving or patterns in colour and gold. The floors are paved with marble, and provision is made for a system of aqueducts to pass along the entire length of the buildings, partly to supply water for the numerous *hammams*, but with the main object of adding to each apartment all the refreshing accompaniments of a water-palace. A constant supply of water was obtained by tapping the river Jumna at a point seventy miles upstream and bringing it by canal to the fort, where its inlet was at the northern angle. Here the Nahr-i-Bihisht, or 'Stream of Paradise', as it was called, entered by a scalloped marble cascade in the open central arcade by the Shah Burj or 'King's Tower', and from there was distributed by stone or marble channels in all the required directions. In some of the pavilions it was diverted into fountains, the finest of which is the one completely filling the central compartment of the Rang Mahal and, in the words of Sayyid Ahmad its

> beauty baffles description. It is made of marble and fashioned in such a way that it resembles a full blown flower, . . . yet it is of little depth . . . just like the palm of a hand. The particular beauty of this is that, when it is full of rippling water, the foliage of the inlay appears to wave to and fro. In its centre is a beautiful flower like a cup of marble; moreover, on each curving point and arched cusp, flowers and leaves of coloured stones spring from creeping plants, and creeping plants from flowers and leaves. Within the cup you will find a hole through which the water bubbles up from a hidden channel underneath. The sheet of water falling from the edges of the cup and the waving of the plants and flowers under the dancing water are nothing less than a scene of magic.[8]

From the palaces the water was conveyed to the gardens, of which that known as the Hayat Bakhsh was the largest and most enchantingly laid out. Here, in a strictly formal pattern of square flower beds amidst flowing watercourses, are two pavilions named after the two months of the rainy season, Sawan and Bhadon, both

> decorated with pictures and paintings like the enamelled throne of the Queen of Sheba, or like Solomon's throne studded with emeralds. Through the two waterways of the tanks which are made in the centre of these buildings, the water is always issuing gracefully, and from the edge of their platforms . . . it is falling into the tank below, in the form of a cascade. In the niches, flower vases of gold and silver, full of golden flowers, are placed during the day time, and at night, white wax candles, which look like stars amid fleecy clouds, are lighted inside the veil of water.[9]

This imaginative treatment of the private portions of the fort and of the palaces wherein the emperor took his ease differed, however, from the more sedate character of the official portion where he held durbars and conducted publicly the affairs of state. The Diwan-i-Am or 'Hall of Public Audience' is an expansive columned hall of sandstone with its central bay occupied by a large and stately throne of marble carved and inlaid in the manner of the time. The wall at the back of the throne is also embellished with inlaid decoration, in the form of *pietra dura*, but much of this ornamentation differs materially, both in design and technique, from that in any other Mughul building. One scene particularly is a characteristically accidental representation of Orpheus sitting under a tree and fiddling to a circle of listening animals. It has now become clear that this and several of the surrounding panels of birds and foliage were originally fashioned in Italy, and in the course of commercial relations found their way to India to be acquired as objects of art by someone

of the Mughul court. The artistic character of these pieces suggested their inclusion in the scheme of decoration at the back of the throne, where, surrounded by other panels of obviously Indian handiwork, their exotic appearance has given rise to some speculation.

Almost contemporary with the building of the fort at Delhi was the construction of the Jami' Masjid, which, as already shown, was an essential part of the scheme of Shah Jahan's new capital. This grand mosque, the largest and most eminent in all India, was begun in AD 1644, but was not completed until fourteen years later. In the meantime a somewhat similar congregational mosque was being erected under the emperor's patronage at Agra, which, although not on the same majestic scale as the Delhi example, was nevertheless a structure of considerable size and importance. Both mosques are planned according to tradition and follow the same broad principles as regards arrangements and general style. But given all these common factors they show in the most marked manner how widely two buildings of the same type may be made to differ in effect. Nothing could be more severely dignified or imperious in appearance than the Jami' Masjid at Delhi, or more suitably for its purpose, as it was obviously designed primarily for the ceremonial attendance of the emperor and his retinue, the imposing royal portal on the east with its arcading effectually screening the congregation within from outside observation. An example of the highest type of religious architecture, precise and perfect, it forms a noble pile; the endless flights of steps before each entrance, the lofty white domes and tapering minarets with the broad arch of the façade are admirably disposed. The courtyard, 325 feet side, is in keeping with the great scale of the rest of the building, while the cloisters around the three sides and the symmetrical range of arches comprising the sanctuary are of the same generous proportions. But in spite of its great size, the orderly distribution of its parts and its undeniable grandeur, the building as a whole leaves the aesthetic sense only moderately stirred; it fails to arouse the highest emotions on account of its impersonality and aloofness. The uncompromising rigidity of its long horizontal lines, the harsh black and white inlay of its domes and minarets, its very vastness which necessitates the unending repetition of each detail, all combine to give this otherwise magnificent structure a character which never wholly attracts. On the other hand the mosque at Agra, owing to its humanist values, makes a definitely intimate appeal. Although it lacks the perfection of the Delhi structure—the low position and timid contours of the domes are obvious

defects—its free open frontage bringing everything into view, its rippling succession of kiosks of varying sizes which crown its parapets, the interesting passages of shadow thrown by its *chattris* and turrets, the warm broken colour of its masonry produce an effect of a singularly pleasing kind. It is a mosque evidently built for the benefit of the people; its shady cloisters, informal resting-places and alcoved retreats are an open invitation to all and sundry to spend a quiet hour within its precincts.

While at the principal seats of the Mughuls the white marble style was being maintained, a different phase of building was becoming manifest in the Punjab, notably at Lahore. This took the form of brick construction, with occasional sandstone additions, but owing its distinctive character to the glazed tile decoration with which its entire surfaces were often covered. The fact that Lahore was situated in an alluvial plain, and somewhat remote from any outcrop of stone, partly accounts for this brick and tile development, but not entirely. Since the days of the Ghaznavid occupation, the Punjab capital had been inclined to cultivate an independent architectural tradition, and instinctively to look to the northwest and beyond for its aesthetic inspiration. In the first half of the seventeenth century the Safavid art of Persia had attained its zenith, and for a time Lahore appears to have come under its powerful spell. It was not that the buildings of the Punjab were exact reproductions of those of Shah 'Abbas the Great; they displayed a certain individuality but the brick construction was based on that prevailing in Persia and the glazed tiles were of the same type as those produced in the famous kilns of Kashan and other places on the Iranian plateau. The outstanding characteristic of this style of building, both in Persia and the Punjab, is its accentuation of colour, as it depends almost entirely for its expression on the brilliant display of patterns in faience. To such an extent was this colour scheme allowed to dominate the entire fabric that one of the fundamental principles of good building has been sacrificed, inasmuch as the designers subordinated intentionally all constructional emphasis in order to give precedence to the applied art. Eliminate this ornamentation and the building becomes a bald arrangement of flat surfaces without shadow or any form of relief, mouldings and string-courses are at a discount, the whole structure resolving itself into a mere background on which the tile-setter was encouraged to squander his art unrestrained. That such a procedure produced buildings having any claim to architectural merit is mainly due to the quality of this tile decoration, which is of the highest order, as the brilliantly designed arabesques in variegated hues lit by the eastern sun produce a vitality of effect disarming all criticism. In Lahore and its neighbourhood a large number of buildings were

erected in this style during the reign of Shah Jahan, but owing to the impermanent nature of their construction many of them are in ruins or have entirely disappeared. The immense mounds of soil from the brick kilns of this period testify to the importance this industry assumed, so much so that one Buddhu whose tomb is near Lahore was appointed Chief Purveyor of bricks to the royal establishment. But in all these rubbish mounds, several of which have been excavated, not a trace has been discovered of the glazed tiles nor are there any definite records of such a craft ever having existed in this locality in the past. Panels of faience decorate the exterior of Raja Man Singh's palace at Gwalior, and the glazed earthenware of Multan and Sindh has long been a thriving handicraft, but it is clear from their style and technique that both these are the offspring of an entirely different art tradition. The Lahore tiles are of a type which is unmistakable, and are of two distinct kinds, the 'mosaic' and the 'square'. The former consist of pieces of a glazed composition cut to the shape and colour of the design, and are set together like the tesserae of a mosaic; the latter are usually six inches square and the pattern painted on them is carried across the joints to fill the required space. Exactly similar glazed decoration of both kinds is seen in profusion in the seventeenth-century buildings of Persia and 'Iraq, most of it being made at the town of Kashan, where the name for it is Kashi, which is also the name by which this art is commonly known in Lahore. Some of the designs, notably those in the outer wall of Lahore fort, are much more Persian than Mughul in character, and include suggestions of Mithraic symbolism. Chardin, the French traveller, mentions at this time that Persia supplied India with large quantities of 'earthenware', most probably referring to this trade in glazed tiles.[11] It seems not unlikely therefore that most if not all of this decoration was imported in bulk from Kashan.

The finest example of this phase of Mughul buildings is Wazir Khan's mosque erected in AD 1634, but there are many others, such as the Gulabi Bagh, the Chauburji, and 'Ali Mardan Khan's tomb, all at Lahore, while as far distant as Agra the tomb of Afzal Khan of Lahore known as the 'Chini ka Rauza' is of the same type. The mosque of Wazir Khan, a most picturesque structure, consists of the customary arrangement of buildings enclosing a brick-paved courtyard, with the entrance-gateway, cloisters, and sanctuary all in their accepted positions. Four octagonal minarets rise from the corners, and the domes which roof the sanctuary and the gateway are of the low-pitched 'Lodi' order. Much of the surface decoration, which comprises not only tiles but in the interior patterns painted in distemper, has become considerably abraded.

although sufficient remains to show what a gorgeous glow of colour this building presented when first erected. The walls are flat except for an occasional cornice, oriel window, or balcony, and are divided up into shallow sunk compartments for the reception of the glazed patterns. The fertility of design and the diversity of colour in the scheme are amazing, and although in its present state a somewhat vivid yellow is inclined to predominate each panel, spandrel and border is in itself a work of art, rivalling in the brilliancy of its blues the sheen of the bluejays and green parrots which flit about its walls. There could be no finer illustration of that ardent desire for a display of exuberant colour innate in the east than these glazed tile buildings of the Punjab.

All such forms of architectural expression, however, and even those possessing the formal elegance of the royal palaces, take second place when compared with that masterpiece, of Mughul architecture, the Taj Mahal. During the first three years of his reign, Shah Jahan had already provided in the fort at Agra a palace for the accommodation of his consort, described in the *Shah-Jahan Nama* as 'the Paradise-like buildings of Her exalted chaste Majesty, the Queen of the world, the Begam Sahiba', and identified as the Khas Mahal, the most sumptuous of all edifices up to that time. And as during her life no building was considered too splendid, so on her death it was fitting that her remains should be enshrined within a monument of matchless beauty. Architects were therefore summoned to prepare designs for a mausoleum which to be worthy of her memory should surpass all others in artistic dignity and stateliness. Of the manner in which the design was obtained and who was responsible for the noble building which eventually matured, there are no direct records. What evidence there is, is contradictory. On the one hand, there is the contemporary statement of Father Manrique, who definitely affirms that models were prepared and submitted to the emperor by a certain Geronimo Verroneo, a Venetian, who was residing in the Mughul capital at the time.[1] On the other hand, indigenous documents have been preserved containing a detailed account of those employed on the building, all of whom were Asiatics, with no indication of any European intervention. And as an answer to the Jesuit father's contention there is the standing testimony of the Taj Mahal itself, which shows in all its aspects that it was the natural evolution of the style, true to tradition and entirely unaffected by occidental influence. The truth seems to be that Verroneo was invited, as were others, to produce designs, but that prepared by the Mughul master-builders was the one eventually selected.

Particulars of those who took part in the production of this incomparable masterpiece indicate that no effort was spared to obtain the services of specialists in every phase of the work. Several of these were indigenous craftsmen from Delhi, Lahore, Multan and similar art centres of the Mughul empire, while others were drawn from more distant sources, as has a calligraphist from Baghdad and another from Shiraz, to ensure that all the inscriptions were correctly carved or inlaid; a 'flower carver' from Bukhara; an expert in dome construction, Isma'il Khan Rumi, who by his name may have come from Constantinople; a pinnacle-maker from Samarqand; a master-mason from Qandhar; and, lastly, an experienced garden-planner. The chief supervisor who coordinated the entire work was one Ustad 'Isa, 'the best designer of this time', and, according to one account, originally an inhabitant of Shiraz. It may be noted that while the structural portions seem to have been principally in the hands of Muhammadans, the decoration was mainly the work of Hindu craftsmen, the difficult task of preparing the *pietra dura* specially being entrusted to a group of the latter from Kanauj.

The design finally approved was based largely on the recently completed tomb of Khan Khanan at Delhi, which in its turn was a reduced and modified copy of the mausoleum of the emperor Humayun. But the large edifice enclosing the tomb-chamber of the Taj Mahal, although the main feature of the composition, is only a portion of the scheme as a whole. It is supplemented by certain essential accompaniments leading up to the main building, comprising a garden, entrance-gateways, a mosque, and other accessories that would surround the mausoleum with an appropriate setting. In the preliminary thought expended on these amenities the Mughul architect excelled, every need was provided for and no incongruous changes were afterwards introduced to mar the effect. The result was that before the actual construction was even begun every minute detail, useful or ornamental, was correctly specified. Outside the precincts of the Taj itself among other annexes were buildings for the accommodation of visitors, their attendants and conveyances, a bazaar for their maintenance and a forecourt with a wide approach to avoid congestion of traffic. Nothing was omitted; a more complete layout it would be impossible to conceive. The position of the building was also carefully considered. The site selected was on a high bank of the river at a bend, so that from every point of view there was a pleasing effect; on the one side its reflections in the water gave it an added charm, while on the other, from the garden, its white marble façades stand out clearly having no background except the sky. At the same time its proximity

to the river demanded special care in the preparation of the foundations, which it was the practice of the Mughul builder to support on masonry cylinders sunk in the soil at close intervals. Some such system was no doubt employed in the substructure of the terrace, as the entire building including the minarets apparently rests on one firm compact bed of masonry. That the method adopted was a sound one is shown by the condition of the building, for after three centuries, during which it has suffered serious neglect, its lines and angles are still as accurate as when first produced; any deviation from the true [*sic*] in a structure which relies for much of its beauty on the mathematical precision of its outlines would of course be fatal.

The whole scheme, including the garden, is laid out in the form of a rectangle with its long axis lying north and south, the mausoleum standing at the northern end, a departure from the traditional square plan with the main building in the centre. This rectangle is enclosed by a high wall with broad arcaded turrets at each corner, and is entered on the south side by a monumental gateway, in itself an admirable composition. Within the enclosure is the conventional garden, so designed as to comprise an intrinsic part of the architectural effect, the avenue of cypress trees being planted to harmonise with the lines of the building, and the watercourses with their ornamental pools elevated in such a manner as to reflect the most attractive points of view. At the northern end of the enclosure is a wide terrace with the mausoleum occupying the centre and balanced by subsidiary building on either side. The latter consist of a mosque on the west and corresponding structure of no special religious significance on the east, but added in order to maintain strict symmetry. Although naturally intended as the predominating feature in the scheme, the mausoleum building in itself is remarkable for the vivid simplicity of both its plan and elevation. It rises almost abruptly from the high marble terrace, with no noticeable flight of steps leading up to it, for the stairway is concealed within a passage, thus unconsciously adding to that atmosphere of reserve in keeping with its chaste character. The plan is square with chamfered corners, each side being 186 feet long, so that the width of the façade is equal to the entire height of the building. Its elevation is divided approximately into two parts of equal height, the lower half consisting of the rectangular ground storey, the upper half of the great dome and its accompanying kiosks. Externally, each façade of the lower rectangular portion is relieved by an arrangement of arched recesses, and to the rich shadows within these voids the whole

structure owes much of its charm of effect. But its crowning glory is the great dome, which hangs in the sky like a shapely white cloud, its soaring height being mainly due to the tall drum at its base. The body of the dome is spherical, so that it rests on this drum like a ball on a cup, but its upper curve by means of a carefully calculated tangent gracefully tapers off into a foliated crest. To give a finish to the whole composition as well as to draw the eye of the spectator imperceptibly from undue concentration on the central structure, at each corner of the terrace rises a slender minaret.

The interior arrangements of the mausoleum building consist of a crypt below and a vaulted tomb-chamber above, with other rooms, one in each angle, all connected by corridors, light to every part being obtained by means of perforated grilles set in the arched recesses of the exterior. At a height corresponding to the parapet of the façade outside, the tomb chamber is ceiled over so that above this the whole of the interior of the great dome becomes a hollow space, a notable illustration of the system of double dome construction. As to the scheme of decoration, both inside and out, this is everywhere in keeping with the broad unity of the building and the chaste white marble of which it is composed. Certain portions are enriched with patterns carved in low relief, but the principal embellishment is obtained by arabesques of inlaid coloured stones—*pietra dura*.[12] Of the former method the square borders of inscriptions around the main archways are artistically designed and chiselled, and the dados in the interior of conventional plant-forms are modelled with exquisite feeling. But it is in the finished quality of the *pietra dura* that the inimitable patience and skill of the Indian inlayer is most plainly shown, as his share in the decorative effect ranges from the bold scrollwork in the spandrels above the great arches to the minute flowers on the cenotaphs and the perforated marble screen which encloses these. This perforated marble screen is said to have replaced a gold and jewelled railing, so that it is not part of the original design, but in a later introduction it shows that the high character of craftsmanship was maintained. The delicate carving of the marble into a grille of graceful volutes and the enrichment of each scroll with inlaid precious stones has produced a work of art of entrancing beauty, but even this is surpassed by the *pietra dura* on the cenotaphs themselves, which is cut with the fineness of a cameo. Diapers and borders of pendant flowers, sprays of foliage with lilies and other floral forms either in detached repeats or contained within curved panels, are evenly distributed over their marble

surface. So sensitive and yet so firm is the drawing that it resembles the spirited sweep of a brush rather than the slow laborious cutting of a chisel.

In addition, however, to its artistic merit, the scientific thought and technical skill expended in the construction of this monument is remarkable. Particularly is this noticeable in the subtle overhang of the great dome, which shows that the builders were conversant with the principles of tension, stress and strain, so that this problem presented no difficulties. The contrast in the character of the large dome with the cupolas over the kiosks denotes that two different traditions here meet in the same building. The main dome by its shape is plainly of Timurid extraction, its remote ancestor being the Dome of the Rock at Jerusalem; on the other hand the cupolas with their wide eaves are of indigenous origin, being derived from the overlapping rings of masonry which formed the vaulted ceiling of the Hindu temple. For the centering of the dome timber, scaffolding supplemented by brick was employed, as noted by Tavernier.[13] Although details are lacking, light is thrown on this aspect of the work from an interesting source, for some of the miniature paintings of the time depict in a lively manner the various methods then in use including that of centering.[14] The design of the minarets was suggested by those over the entrance to Akbar's tomb at Sikandra, although there is a notable difference in their surface treatment. In the minarets of the Taj the face joints are counter-sunk, forming a kind of rustication not seen in any other part of the structure, and so by a subtle contrast in texture aiding in their detachment from the main building. In this manner by a combination of the finest art and the most expert construction the Mughul craftsmen have produced in the Taj Mahal a monument which has most nearly reached the utmost height of perfection. Added to this the building owes not a little of its sensuous charm to the extraneous effects of the atmosphere, and the variations in the light on its marble surfaces. The marble when first won from the uninspiring mounds of Makrana is itself of a superb texture—while with a delicate grey grain. In the course of centuries, mellowed by the sun, and sand-blasted by the red dust of the surrounding country driven into it by the monsoon rains, it has acquired a patina, almost imperceptible but sufficient to affect its colour values. The result is that the building assumes at different times a variety of tints, from a cold grey at dawn, shimmering white at noon, and suffused with a tender blush rose in the afterglow, with a wide range of half-tones in between. And in the light of the moon

another and entirely changed palette is called into requisition. On some of these occasions, with the flowers in the garden painting the foreground with their vivid colouring, it seems as if the hand of nature and the hand of man had united and done their utmost to produce a spectacle of supremely moving beauty.

The mausoleum of Shah Jahan's queen, although apparently complete in itself, was intended, however, as only one part of a more comprehensive architectural scheme. On the opposite side of the river, where is now the Mahtab Bagh, the emperor planned his own tomb, a replica of the Taj but in black marble, the two monuments to be connected by a bridge. Tavernier definitely states that 'Shah Jahan began to build his own tomb on the other side of the river, but the war which he had with his son interrupted his plan, and Aurangzib, who reigns at present, is not disposed to complete it'.[15] And in support of this contemporary record there is the testimony of the cenotaphs themselves and their position in the tomb-chamber of the Taj. Here Mumtaz Mahal lies proudly in the centre, a fairly clear proof that the building was intended for her remains alone; subsequently, and on one side, was inserted the cenotaph of the emperor, evidently an afterthought because his own separate resting-place never matured. That Aurangzib's unfilial actions and bigotry generally were responsible for this project being abandoned there seems little doubt, and owing to these personal failings humanity has been deprived of an architectural composition which for romance, imagination and magnificence would have had no equal. With this emperor's accession to power the course of the building art under the Mughuls came to an end. Aurangzib added a few structures, some of them large and pretentious, to the long series of monuments erected by this dynasty, but compared with those of his predecessors they are decidedly inferior. The sudden decline of the art towards the middle of the seventeenth century may be traced to several causes. There is the obvious reason that at this time the Mughul empire itself had begun to totter, and with it the cultural activities patronised by the dynasty suffered neglect. Associated with this political and artistic decadence was the personality of Aurangzib himself, whose philistinism and narrowness of outlook were largely responsible for the disintegration. On the other hand the decline of the style may have been due to the natural progress of events. Under Shah Jahan the country had experienced a period of unrestrained production, during which its exponents had reached the summit of achievement. The usual sequence to such a condition is a marked reaction, of which art history

provides several notable instances, including among others that of the great schools of painting in Europe of the seventeenth century, whose finest efforts were followed by an interval of profound exhaustion. And so it was with the architecture of the Mughuls. It has endured its golden age, run its course, and even before the reign of Aurangzib had begun to show signs of decadence. The shallow elegance of some of Shah Jahan's later buildings, as for example the Machhi Bhawan in Agra fort, is a forecast of what was about to take place. Its energies dissipated by the very number and grandeur of its conceptions, with nothing further possible, a period of sterility was inevitable. It is questionable whether any human power, even that of vigorous imperial patronage, could have changed the course of destiny or prolonged its life another span.

One of the few large buildings of Aurangzib's reign, but one which fully illustrates the change that was then taking place, is far removed, however from the majority of the Mughul monuments, as it is in the Deccan. Near the town of Aurangabad, now in the Nizam's dominions, this emperor caused to be erected in AD 1679 by 'Ata-ullah, Chief Architect', the mausoleum of his wife Rabi'a-ud-Daurani. A frank copy of the Taj Mahal, although approximately only half its size, it shows in the thirty years that intervened the extent to which taste had deteriorated and the style become impoverished. With inadequate knowledge the architect had evidently endeavoured to improve on the proportions of the Taj, and also to enrich it with considerable superfluous ornament. The result, as would be expected, is a very mediocre production, the relation of height to width being unpleasing, leading to a loss of dignity and a congestion of the structures around the base of the dome. Almost every arch is demeaned with miniature cusps, the cornices garnished by insipid mouldings, and the surfaces are aggravated by spiritless arabesques. Those outstanding qualities of simplicity and breadth which make the Taj so profound and satisfying have been disregarded, and meaningless efforts at embellishment have been applied all over the building. But although the structure as a whole shows such marked evidence of debasement, the same cannot be said of some of the applied art with which it is decorated. The fine quality of some of the accessories proves that good craftsmen were still available. The octagonal screen of white marble enclosing the sarcophagus is carved in a perforated pattern equal in workmanship to that of the previous reign, while some of the designs in bas-relief are exquisitely modelled. But the finest ornament is in metal, some of the doors being of beaten brass with bold floral panels and borders hammered and chiselled in masterly fashion. The hand of the craftsman was still effective; it was the spirit of the art that had declined.

Owing perhaps to being in one of the Mughul cities of Hindustan, and not so distantly situated as the previous monument, fewer defects are observable in the Badshahi Mosque at Lahore. Its production was the work of Fidai Khan Kula, Aurangzib's Master of Ordnance, whose engineering experience enabled him to plan and erect a building of sound construction and great size. But even his technical skill could not build to withstand the earthquake which in AD 1840 shattered its four minarets, the principal feature of the design. Without these the building loses much of its effect, but there is a certain dignity in its broad quadrangle leading up to the façade of the sanctuary, a scheme in red sandstone laced with marble. The three bulbous domes are well proportioned, and rise into a grand mass of white marble above the western wall, which presents an almost unbroken surface of masonry of imposing appearance. As a contrast to the excess of decoration in the mausoleum referred to above, this mosque marks the other extreme; its ornamentation, although boldly conceived, is sparingly introduced, so that the general impression it conveys is uninteresting, the attempt at economy of detail defeating its own purpose. Another and entirely opposite example of the Mughul style, as manifested in the time of Aurangzib, is the mosque at Benares, the minarets of which dominate the city with their slender prettiness but entirely lack stability or strength. It illustrates with the other buildings executed during the emperor's reign the inconsistent nature of the art and the extent to which it had fallen away from its previous standard toward[s] the end of the seventeenth century. The final state of the style in the eighteenth century is seen in the tomb of Safdar Jang, a large and pretentious structure erected in Delhi as late as AD 1753. As it is situated a comparatively short distance from the mausoleum of the emperor Humayun, it is an easy matter to compare the two monuments, the first and the last of their kind.

A period of nearly 200 years separates the one from the other, and the change that has taken place is illuminating. They represent the extremes of their style, that of the emperor expressing in every line its power and exultant vitality, and that 'dew of the morning' which marks the beginning of every new movement. On the other hand, the tomb of Safdar Jang seems to be striving by artificial means to reproduce the original vigour, while in reality it is enfeebled and decadent. Gone are the balanced proportions with broad simple planes, and in their place is an ostentatious and affected structure, each part embarrassed with

repetitions of weak and tasteless motifs. It was a final effort to recapture the old spirit of the Mughul style as seen in the royal tombs when the dynasty was a living force; but by this time the art had gone beyond any hope of recall.

Notes and References

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CHAPTER I.6

The Qudsia Bagh at Delhi: Key to Late Mughal Architecture*

HERMANN GOETZ



Under the influence of nineteenth-century European classicism we have long confined our appreciation of Mughal art to the sixteenth and seventeenth centuries, i.e., to the reigns of Akbar, Jahangir, Shahjahan and grudgingly also to Aurangzeb. Whatever belonged to a later period, was dismissed as decadent. Since, the concepts and ideals of art history have become more comprehensive. We have learnt to understand not only static forms expressing a quiet and well balanced, never disturbed harmony, but also dynamic types trying to express tensions and high-strung emotions, releasing them in complicated rhythms suggesting the never completed growth of life, not balanced, but striving towards a merely felt or indicated higher harmony in the life divine. The first has been called the classic or Apollinic ideal, the second the romantic or Dionysiac. Of the latter, two kinds have been distinguished, the grand style, majestic, tragic, sometimes even pompous, and the light style, playful, musical, dancing, even frivolous; and for them the terms Baroque and Rococo have been adopted which at first had been applied as mere deprecative names, to the post-Renaissance styles of sixteenth-seventeenth, respectively seventeenth-eighteenth century Europe.[1] However, these style types are not peculiarities of European art; they represent the characteristic phases of all late styles in all countries and in all ages, and they cover also the hitherto neglected later stages of Mughal art and of its Hindu branch styles.

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When we realise that the Baroque and Rococo phases of an art do not mean a degeneration, but a shifting of the aesthetic accent from a quiet and static to an emotional and dynamic ideal, we can no more treat Mughal and post-Mughal art subsequent to the reign of Shahjahan as a degeneration. We must rather try to understand the change of its ideals and the social and psychological causes of this change, i.e., the progressing Indianisation of Mughal society, the disintegration of the empire into a loose conglomeration of semi-independent aristocratic families, and the growing insecurity of life leading to a correspondingly intensified enjoyment of its pleasures, however with an underlying anxiety, an awareness of the transitoriness and vanity of these very enjoyments.[3] Likewise we find the two phases, the grand style from the later reign of Shahjahan to that of Farrukhsiyar when court etiquette and an increasingly militarised administration had to emphasise the personal authority not only of the emperor, but also of his nawabs; and a playful frivolous style evolving under Muhammad Shah and Ahmad Shah and taken over by the various succeeding principalities. And it is interesting to observe that this last phase of genuine Mughal art again became the 'simple' foundation of another semi-Hindu style-cycle, most involved and full of tension and emotion, though no more than its counterpart in the last pre-Muslim Hindu art of the eleventh–thirteenth centuries.[3]

The two key monuments of the transition between the last phase of the genuine Mughal architecture and the all-Indian court style evolving from it during the subsequent hundred years are Safdar Jang's mausoleum and the Qudsia Bagh at Delhi. But although the first is the more impressive, more solidly built and much better preserved monument, for art history the poor ruins of the Qudsia Bagh are of much greater interest. Safdar Jang, though a most vain and selfish politician, was anyhow the scion of an old Persian family firmly established in Mughal hierarchy, and therefore susceptible to the past glories of an empire then sinking into its grave. His mausoleum, therefore, gives expression to an antiquarian effort to revive the tradition of Central Asian mausoleums, from the mausoleum of Humayun to the Taj Mahal and the Bibi-ka-Rauda. As such it is a dismal failure, notwithstanding the innumerable beautiful details of its decoration. Qudsia Begum, on the other hand, had been a low-born dancing girl before she was raised to a short-lived position of power and splendour by the coincidence of circumstances; and her garden palace was an elegant pleasure house, embodying the latest and boldest fashions of the day in order to serve for a fast life of reckless luxury and amusement. Whereas Safdar Jang's mausoleum never could

be more than a half-hearted precursor of the architecture of Oudh under Shuja ud-daula and Asaf-ud-daula, the Qudsia Bagh is for us the great link between the Mughal and post-Mughal art especially such as the latter developed in Rajputana, at the Sikh court of Lahore and in the Maratha states.

At present the Qudsia Bagh[4] forms a modern public park north of the Kashmir Gate of Delhi, in which only a handful of pitiable ruins, the old entrance gateway and a mosque, half-hidden behind shrubberies, and the exterior wall of the northern *bārādari*, now disfigured by modern enlargements, testify to its past glory. And yet it was destroyed only in recent times, so that we are fortunately in possession of a detailed view of the 'Northeast Corner of Cotsea Bhaugh, on the River Jamana' by the well-known British artists Thomas and William Daniell.[5] Up to the siege of Delhi in AD 1857 the building was still more or less intact. In AH 1249 (AD 1833–4) Bahadur Shah II had its mosque repaired.[6] But when General Nicholson prepared his decisive attack on the Water Bastion and the Kashmir Gate, two batteries of six 18-pounders and ten mortars were lodged behind its walls, the fine garden of lemon and orange trees was cut down, and embrasures were broken into the southern enclosure, and in the ensuing artillery attack the building was ruined. Even in the 1870s most of the garden palace was still discernible, the enclosure, the servant quarters, two *bārādaris*, the mosque and the water-works.[7] But early in the twentieth century most of it had already been sloped,[8] and only one corner tower, part of the northern façade (transformed into a bungalow) and the mosque at the south-eastern corner can still be seen.

Once, however, it must have been a most impressive block of buildings, more than 1,000 ft. long, several hundred feet broad, and three storeys high. The western façade had two small corner towers and a central gateway. The latter, 35 ft. high, 74 ft. long and 55 ft. wide, is rather a heavy building with several poorly lighted central vaults, once separated by a partition wall, and a series of smaller rooms and balcony niches leading up to the roof. On the inner side this façade was lined by rows of cells. In the centre of the northern (and southern) sides, there were *bārādaris*, 39 ft. long and 20 ft. wide, with three open arches going onto the garden, standing on terraces 5 ft. high. In the south-western and north-western extremities, near the entrance, there were two blocks of buildings, mainly for the servants, kitchen, etc. 100 ft. wide and 500 ft. long, enclosing two courts. In front of the exterior gate there was a sort of bazaar. The eastern half of the compound was occupied by the garden proper and its famous water-works. It must have contained the residential

pavilions of the Begum, though hardly anything is known about this more intimate and costly decorated part of the Qudsia Bagh. On the riverside it was hidden behind a façade with two octagonal pavilions and three *jharokhas* looking over the water. The mosque seems to have been outside the enclosure, but adjoining. Its now open court measures 86 × 28 ft., with an ablution tank almost 32 ft. long and 27 ft. 10 inches broad. West of it the mosque proper stands on a platform, 3 ft. high and consists of three domed compartments forming a praying chamber, 68 ft. long and 33 ft. 10 inches deep. In its northern wall there is a marble slab with Bahadur Shah II's inscription [dated] AH 1249. Adjoining the northern side, there are some rooms, which apparently served as a habitation for the mullah. All this was constructed in bricks, but covered with very solid and fine plaster, except for some occasional finials of red sand-stone, and almost gaudily painted in gilt.

The decoration of the Qudsia Bagh was indeed a true expression of the taste and the habits of its builder and occupant. Udham Bai[9] was a low-class dancing girl who had been introduced to the 'gay emperor' by Khadija Khanum, the daughter of Amin Khan. For a short time she became Muhammad Shah's favourite and bore him a son. But soon her vulgar ways aroused his displeasure, and she sank into obscurity, and might have been forgotten for ever if the times had been different. For in an age when the empire was fast moving to its final disintegration, the selfish nobles in power preferred an emperor whose character would not hinder them from looting their last remains of the imperial glory.

In her misery Udham Bai had secretly become the mistress of Jawed Khan, the head eunuch of the imperial *zenana*. When Muhammad Shah died in AD 1748, Jawed Khan helped her son to the throne as Ahmad Shah. And he proved to be exactly what the nobles had desired for, a young man who never cared about the government, but spent his time in the *zenana* with the various concubines procured by the eunuch, with dancing girls and the disreputable relatives of Udham Bai, pimps, male dancers, and minstrels. Now the dancing girl was empress-mother, the 'Hazrat Bai-ji Sahiba', the 'Sahib-ji Sahiba on Whom be Peace', the 'Parent of the Pure', the 'Lady of the Age', the 'Nawab Qudsia Begum' the 'Qibla-i 'Alam'. She was now a mansabdar of 50,000, a rank much higher than the highest members of the dynasty had ever occupied in the golden days of the Mughal empire, and her brother Man Singh, a disreputable vagabond, was raised to the princely rank of 6,000, whereas the proud and high-born widows of Muhammad Shah, Malika-az-Zamani and Sahiba-Mahal, were kept, in humiliation and abject poverty. But even these fabulous revenues did not suffice for the prodigality of

the ex-dancing girl and her clique. True, she was kind to Muhammad Shah's children and also lavishly helped people for whom she felt some gratitude. But most of the money was squandered senselessly, on her last birthday party in AD 1754 when she spent 20 million rupees.

But nobody cared from where the money came. The government was bankrupt. The empire existed merely in name. The governors of the provinces had ceased to send tribute. The districts round the capital were plundered to the last. The rebels fortified their towns and villages and expelled the imperial tax collectors. And at last they were taken under the custody of the Jats, the Marathas, the Bangash and Rohilla Afghans, or the various nobles. There was no regular administration. The city and its neighbourhood was divided into a number of rival aristocratic camps, and the imperial durbar a pretext for obtaining a legal title for further looting and interference.

Bahadur Khan Jawed Khan, now a mansabdar of 6,000, cashed immense bribes as *dārogha* of the *Diwan-i-Khass*, and the only person who had always access to the *zenana*, to the emperor and his mother. This illiterate but unscrupulous man soon came to be so hated by the other nobles that at last he was murdered. His principal opponent was the *wazir* Safdar Jang, all-powerful as commander-in-chief of the troops (i.e., his own troops) and Nawab over the rich province of Oudh, and yet powerless because of his frequent absence from Delhi and his inability to obtain access to the Emperor in the *zenana*. This brutal, vain and often foolish man was hardly less hated than the greedy eunuch. And against both were played out Ghazi-ud-din, son of Asaf-Jah Nizam-ul-Mulk, Intizam-ud-daula, son of the *wazir* Qamar-ud-din, and Imad-ul-Mulk.

The imperial guards were never paid. They mutinied and insulted Qudsia Begum and her eunuch paramour with most disgraceful practical jokes, and had at last to be disbanded. With this the latent conflict between the nobles developed into a civil war, into which first the Jats, then the Marathas were drawn. First Jawed Khan was trapped and murdered by Safdar Jang in AD 1752, and the Emperor made a virtual prisoner. The next year Safdar Jang was expelled by a conspiracy of nobles with the help of the Jats. Delhi was looted by the latter, but Ahmad Shah's cowardice prevented an imperial victory. Thereon Imad-ul-Mulk summoned the Marathas under Malhar Rao Holkar who had just made peace with Madho Singh of Jaipur, arrested Ahmad Shah and his mother and put Alamgir II on the throne. In a litter Qudsia Begum, now again mere Udham Bai, and her son were brought into a prison and later strangled.

Very few monuments give witness to this short and reckless period.

Safdar Jang's mausoleum has already been mentioned. Ahmad Shah is credited with the poor Chobi Masjid (AD 1750) in the Red Fort,[10] Jawed Khan erected the petty and cramped Sonehri Masjid (AD 1751),[11] with its gilt domes, in the Chandni Chauk. Qudsia Begum built the other Sonehri Masjid (also AD 1751), southwest of the Fort, just beyond its moat, a small, but much better building than its namesake in the bazaar. But her chief monument is the Qudsia Bagh. It is but natural that she wanted to have her own palace. Her actual power was even greater than that of the Emperor, but this power rested on two pillars, i.e., that Ahmad Shah possessed all the paraphernalia of power, and yet was never interested in using it. And as the Emperor's passions were absorbed by his *zenana*, she was obliged to leave this for the imperial amusements, not to speak of the other rightful occupants whom she could humiliate, but not expel.

Thus the Qudsia Bagh became her home, vast enough to make it an artificial paradise, and strong enough to keep misery, insecurity and unrest of the time outside its mighty walls. Its outlay has already been described. It now remains for us to study its decoration such as can be reconstructed from the fragments and old illustrations left.

As already mentioned, this decoration was executed mainly in painted plaster. The chief reason for this could have been lack of funds, for Qudsia Begum, like her contemporaries, squandered money, even at the cost of the last remnants of the state. And we must not believe that the Qudsia Bagh was not a most luxurious palace during the years when it was occupied. For if there were no ceilings of goldsheet or marble walls inlaid with agate, malachite, turquoise, etc., the display of silk, gold embroideries, etc. at this time was much more ostentatious than in the seventeenth century. The difference was due to other reasons. Within the shortest time the most pompous palace had to be conjured up and with cheap, but skilfully worked materials surely quicker and more impressive results could be obtained. Whether the splendour would last, this question was not of much interest. True, Safdar Jang had not followed this principle; but his mausoleum was to be a house for eternity, and he could command the rich resources of Oudh; but even he could afford only red sand-stone and stucco, and white marble merely for his cenotaph. And for the Sonehri Masjid also Qudsia Begum had used red sand-stone. But a palace was neither a mosque nor a tomb. In those days when the authority of the imperial court extended hardly beyond the surrounding district, it was practically impossible to get marble either from Alwar

from Makran, and even the red sand-stone was available only in limited quantities. But there existed no such limitations with regard to brick and plaster. And well-trained artisans could be had in any number and at cheap rates, though the emigration of unemployed artists from Delhi to Farrukhabad, Jaipur, Bikaner, Jodhpur, etc. had already set in. Thus, rich stucco modelling, polishing and painting could make good for the cheapness of the material. And even more the novelty of forms and the audacity of new experiments could amaze the visitor.

However, this novel art was not new as such; for its first stages go back to the reigns of Aurangzeb, even of Shahjahan. But what then had been no more than occasional experiments, now became the rule. The principal tendencies may be defined as follows: most of the old architectural and ornamental forms had become so worn out that they lost all direct appeal; they did not disappear, but were reduced to mere basic elements for new combinations of the most varied type. In the simplest case the combinations consisted in a more or less numerous reduplication, in the extreme case in the complete fusion of older forms into new ones. Likewise were the straight lines superseded by broken and curved, i.e., dynamic lines, the flat forms by rounded ones, the simple by involved types. This same ideal was fulfilled by a dynamic organisation, a rhythm not only of alternating big and small forms, but also of a slow but well-defined intensification and relaxation of accent. On the other hand new forms were developed by the introduction of a new naturalism, a transformation of most architectural forms into vegetal, especially flower motifs of fundamentally Hindu character, sometimes treated in quite a symmetrical and realistic manner. This meant an exuberance which first created a rather heavy effect; but as a further reaction the individual forms were so stretched and slimmed and subordinated to coordinating key motifs that the eventual effect was one of gay lightness.

It is not quite easy to exemplify these various tendencies for the same basic forms were subjected now to this, now to that evolution, resulting in quite different new types; and many of the new forms were the product of a fusion of quite a number of originally different prototypes.

The vast exterior wall, only rarely broken by windows or *jharokhas*, was organised by a system of alternating big and small blind arches. This arrangement had been known already in Akbar's time. However, its rhythm had now become more complicated, ogival, pointed, keel and multi-scalloped arches being used, or plain panels, blind arches filled with rectangular blind windows or small *jharokhas*, arches rising from

plain pilasters and others resting on rich half-columns, the size change ing not in simple interrelations, but in a slowly intensified or relaxing rhythm. And all this, again kept together by long plinths and friezes of lotus petals or a broad cornice supported by 'stalactites'.[12] More accentuated parts, such as gateways, niches, bays and balconies were framed between oblong panels such as the Persian and the earlier Mughal architecture had once borne the eulogistic inscriptions of Quranic quotations, but now the inscriptions disappeared, the panels were often reduced to miniature size[13] and even led round arches in a continuous band.

Since Aurangzeb the corners of mosques, entrance buildings, etc. were flanked by cannellated quoin pilasters capped by a flower-like top platform,[14] a motif first developed in the architecture of the Deccan sultanates.[15] They are to be found also at the mosque of the Qudsia Bagh. But those flanking the entrance gateway of the palace have been transformed into gigantic and rather heavy round lotus pillars, under the influence of the then current type of bellied lotus columns. The *kanjuras* on top of the mosque are unusually massive, but otherwise not exceptional. But those on top of the entrance to the Qudsia Bagh have undergone an amazing transformation. Their profile has been turned, as on a lathe, into the round, resulting in what might be described as a combination of a lotus column basis, capital and small lotus cupola, or like a lotus dome on its drum of lotus petals squeezed together as eventually to resemble a sort of flower pot.[16] The cornice has been almost reverted. Formerly the sloping pent-roof supported by brackets had been its chief characteristic. Now this has become a horizontal balcony platform resting on an impressive system of stalactites (a return to the Persian order still common in the Punjab under Aurangzeb); and one step further even this stalactite system is discarded in favour of a simple concave projection, now without any platform or pent-roof on top.

Columns and arches have not basically changed, but have become much richer. The columns are of the bellied lotus type developed in Aurangzeb's time, very heavy where accentuated, slim and elegant in more involved settings. They are now cannellated (or better bundled) and scaled (i.e. covered with small lotus petals, as the colours prove), and correspondingly the arch has been duplicated and triplicated and is likewise scaled. Its curve has become much more complicated. Simple keel, pointed and ogival forms are not absent but turn up only as parts of richer combinations. Generally the scalloped arch is the rule, often still of the type common under Shahjahan and Aurangzeb, though enriched by single leaflets growing from it, and rich, symmetrical and half-naturalistic flowers on top. Sometimes, however, it is endowed with a

fringe of diminutive petals which can likewise be traced also along the borders of rectangular panels. This petal fringe is a very old Indian ornament, in evidence already in later Gupta temples. In the nineteenth century it became almost the rule. However, where the arch continues to be of simple structure, its outlines become complicated, the scallops are of varying size and curve, depressed and high scallops alternating with others so diminutive as to be hardly more than incisions. The depressed arch, plain or scalloped, represents a new development, reflecting the curve of the *bangaldar* roof with which it is now almost fused. This entails another change, the transformation of the crowning flower growing from the top point of the arch into a broad leaf winding up from beneath the centre of the depressed arch. Finally, the scalloped arch also turns up framed by a simple architectural frieze with miniature panels such as formerly had framed only the rectangle enclosing the arch and its spandrels.

Likewise has the basis of the arch undergone an incisive alteration. This had begun already under Aurangzeb. Where in an arcade two arches met on top of a pillar, an empty space was left between them. This space was now enlarged by interposing, between the capital and the arches, diminutive brackets of the Hindu type common in Akbar's and Jahangir's buildings, and filling the interstices with the traditional Mughal flower vase. As those brackets often were of a vegetal character, already in Shahjahan's time a fusion set in of all these varied elements into one set of leaf-and-scroll-work often ending in closed lotus buds.[17] However, these forms were not fixed earlier than the beginning of the nineteenth century, and until then we could find all the variations between individual lateral or central leaf scrolls[18] or both leaf types combined, or the scrolls framing lotus rosettes and half roundles, with the lotus or other bosses or without them, or all this reduced to a repetition of the lotus capital.

But all this represents no more than the basic evolutions. For the arch was further developed in the direction of both its outer and inner side. In the first case it was combined with the *bangaldar* roof and the lotus dome, executed merely in relief, not in genuine structure, into a new unit. The *bangaldar* roof was reduced to a mere indication of a pent-roof or cornice following the outline of the depressed arch. And again the lotus dome was depressed and dragged down so as to form a mere bulbous roof on top of that curved arch cornice. And at last the dome was likewise reduced to a mere roof indication on the double lotus drum now surviving as almost the only conspicuous detail of the whole, now completely worn-off set. The first stage of this development we can trace

in the Moti Masjid of Delhi Fort where it is combined with flanking domes; and this combination with the domes was later to fuse into the broken *bangaldar* roof type. Then this motif recurs in the decoration of the *bārādaris* on the north (and south) sides of the Qudsia Bagh. But first in the entrance building of the latter we find it in a definite pure form, next in Safdar Jang's mausoleum and at last in the architecture of Faizabad [*sic*], Lucknow, Jaipur, etc. In later times the process of fusion and variation went even further when the depressed arch was superseded by a depressed scalloped arch. For thereon first also the pent-roof cornice, and next the remnants of the dome became scalloped, and eventually the dome transformed itself into a mere second storey of lotus petals crowning those of its former drum.

On the other hand the arch fused with the niche and the interior cupola-ceiling. The first step was the breaking-up of the simple many scalloped arch into several parallel arches such as could be seen first in the Rang Mahal of Delhi Fort, and then, already more developed, in the Taj-ul-Masjid south of the Red Fort (built by Zinat-un-Nisa Begum). This development was faciliated by the common use of red sand-stone slabs which were generally traded in certain standard strengths. In the mosque of the Qudsia Bagh the next stage is reached by connecting these arches by a concave 'network ceiling' of simplified stalactite or bandrum design. The other development converging on the first we find, e.g., in the Patthar Masjid at Srinagar (by Nurjahan) and in the gateways of Delhi City. Inside the exterior arch is a rounded niche into the back of which the interior arch is broken, whereas the other windows and gates inside the now no more so deep niche have disappeared. Already in the Patthar Masjid both are connected by the elaborate vault network evolved from the Persian stalactites. In the gateway of the Qudsia Bagh we still find the older type, a simple arch framed by a scalloped arch. In the mosque the exterior and interior arches are scalloped, but the inner arch is duplicated and interconnected by a concave network and on the outside it is lined by the indication of a simple keel arch. And the niche between them has been covered with a most complicated network of the details of which it is difficult to say how far they still represent stalactites or are a mere diminutive repetition of the blind-arch decoration of the great palace enclosure.

This evolution of the niche-arch is reflected again on the cupola ceilings of the interior of the mosque. The arches no more support a system of squinches and of a drum bearing the cupola, but are broken into the latter in the same way as the just discussed inner arches of the niches

fitted into the network of the latter. On the other hand the exterior lotus dome is now mirrored in the interior ceiling. The centre of the ceiling has become a gigantic flower of lotus leaves. Such ceilings are already found in Aurangzeb's buildings, where, however, plantain leaves were preferred, as also in other places.[19] In the Qudsia Bagh the development is led even one step further, in so far as in the centre also the negative of the exterior lotus knob on top[20] is reproduced. This forms the transition to the beautiful ceiling decorations which we later on find in the interior of Safdar Jang's mausoleum, at Lucknow, Jaipur, etc.

On the river façade of the Qudsia Bagh, now destroyed, other interesting form developments can be observed. The towers there have been broken up into a delicate system of *jāli* windows, *jāli* wall panels and *jali* balconies resting on a frieze of gigantic lotus petals, and interlinked by a system of lotus columns designed like Hindu flower wreaths where flower is inserted in flower over flower. These slim lotus columns again present a revival of an old motif of Hindu architecture common from late Gupta to Gahadawala and Vaghela times. The windows of the lower storey merely repeat a type already known in Shahjahan's time. But the balconies of the upper storey show new developments. They rest on gigantic, stylised lotus flowers, a motif known already in at least fourteenth-fifteenth century Jain architecture, though not yet fully developed. The slim columns look like lotus stalks, the roof is a combination of three interlinked *bangaldar* roofs, following the curve of the arch of the three windows underneath, and supporting one to several interlaced lotus domes. This combination of several *bangaldar* roofs and domes can first be traced, in a still tentative stage, in the mausoleum of Muhammad Quli at Bhangarh, Alwar (AD 1706) and in the buildings of Sawai Jai Singh II at Jaipur. In the Qudsia Bagh towers we find already its classic form which was next taken over in the Hawa Mahal at Jaipur, and then was to dominate the whole architecture of the later eighteenth and early nineteenth centuries. It is worth mentioning that here, too, the new development is inspired by Hindu concepts, for it is a mere repetition, in the Mughal typology, of chapel niches and miniature *shikhara*s piled one on top of the other, replaced by windows and *bangaldar* roofs, and the spires by the lotus domes. And thus it is not surprising that this late Mughal system was again to impose itself on the *garbhagriha* of the Hindu temples of the last Rajput and Maratha period.

The Qudsia Bagh, thus, forms a turning point in the history of the late Mughal architecture. It is the consummation of the Baroque trend of classic Mughal architecture of Shahjahan, Aurangzeb and Muhammad

Shah, of the shift of accent from static balance to dynamic tension. Simultaneously, however, it represents the transformation of the majestic Baroque into the gay and frivolous Rococo. So far it follows the same route as the architecture of the early Nawabs of Oudh. But there the road bifurcates. The Qudsia Bagh represents also the decisive step towards the Hinduisation of Mughal art. This process had already set in under Aurangzeb, unconsciously of course; for nobody would have condemned such a trend more than the orthodox Muslim emperor. But since Ibrahim Adilshah II Deccani art had been strongly Hinduised, and with the annexation of the Deccan sultanates this Deccani style had more and more infiltrated into the Mughal art. Now, however, this trend became more conscious. However pious a Muslim Qudsia Begum might have been, she had been a dancing girl of dark-skinned Hindu origin.[21] The art of the dancing girls had always preserved much of the Hindu spirit. Thus with the 'Hindu' dancing girl dictating the fashion, Hindu sentiment had to pervade the art patronised by her. The Mughal art typology was consciously conserved and respected. Subconsciously it was reinterpreted. The Muslim constructive spirit at last gave way to a Hindu sculptural approach, the Persian clarity to the Hindu joy of irregular growth and involution, the light flowers of Persia and Kashmir to the succulent turgidity of the lotus. It means all the difference of life experience between the Central Asian desert to northwest Indian steppe, and tropical plains. Thus the Qudsia Bagh became the starting point for another Hindu art in the eighteenth and nineteenth centuries, amongst the Rajputs, Sikhs, and Marathas.

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12. For this motif cf. J. Rosinthal, *L'Origine des Stalactites de l'Architecture Orientale* (Paris, 1938).
13. Thus also in the Burhanpur palace of Asaf Jah.
14. This lotus flower is a reinterpretation either of a stalactite system, the first example of which we have at the Qutb Minar, or of closely-set balcony brackets.
15. E.G. Bhagmati's Mosque, Golkonda; Gateway of the Gol Gumbaz, Bijapur, etc.
16. This form has later been imitated in the Sikandar Bagh, Lucknow; still later, in the semi-European transition style of the second and third quarters of the nineteenth century, it became quite common.
17. These lotus buds go back, on the one side to the vertical bosses between the horizontal brackets of the corbelled arch, on the other to the S-shaped ends of the *makara* arch in mediaeval Hindu architecture.
18. The latter evolved from the bases of the Mughal pillars of the seventeenth-century type.
19. Actually these 'lotus' ceilings have a much older history; Aurangzeb's architects took them over from the Deccan where, again, they had been a heritage of mediaeval Hindu Art.
20. An adaptation of the Hindu *kalasa*.
21. Though no portrait of hers is known, her son Ahmad Shah was the only Mughal emperor of pronounced Hindu, dark-brown racial type.

CHAPTER I.7

Tomb of Nizamuddin*

MAULVI ZAFAR HASAN

(*a*) Tomb of Shaikh Nizamuddin.
(*b*) In the village of Nizamuddin.
(*c*) Pirzadahs or the descendants of Shaikh Nizamuddin.
(*d*) AH 725 (AD 1324–5).
(*e*) I. Inscription on a marble slab let into the latticed screen on the north side. It is written in gilded *nastaliq* characters, translation:



'There is no God but Allah, and Muhammad is his prophet.

(1) Thanks (be to God) that the Khan of the dignity of the sky resolved to build the tomb of His Holiness the Ghaus[1] of the world (Shaikh Nizamuddin).

(2) He (the Khan) is the glory of the sun of (his) family and a star of the height of honour, a Sayyid of high descent and a chief of the standing of a king.

(3) Its (the tomb's) founder was a Hashmi (a descendant of Hashim, the ancestor of the Prophet Muhammad) and its builder was (also) a Hashmi, men in whose time flourished poetry and prose.

(4) When I sought to discover its date, the pen of wisdom wrote 'Qiblagah[2] of nobles and commoners' (*i.e.* all) (AH 970 = AD 1562–3).

(5) O! Faridun, turn your face with truth towards his tomb, perchance by the favours of the saint your work may be accomplished.

Scribe of this, Husain Ahmad Chishti.'

*Excerpts from Maulvi Zafar Hasan, *Monuments of Delhi: Lasting Splendour of the Great Moghuls*, ed. J.A. Page (1919; rpt. Delhi, Aryan Books, 1997), pp. 146–52.

II. Inscription on the wooden canopy over the grave of Shaikh Nizamuddin, translations:

(1) 'For the Shaikh of Delhi (named) Nizam (uddin), two Farids made ready all (that is required) in this world and in the next.

(2) One Farid gave him a transitory building, the other raised him to the position of everlasting life.

(3) Murtaza Khan over his grave erected a dome (lofty) as the sky.

(4) A blue cloud rose from the world, and a Pearl dropped into the oyster-shell.

(5) On the earth his square tomb threw wide its four doors (for worship) in all its four sides.

(6) The roof of his sacred tomb was as the high firmament to the earth.

(7) The sky on its four firm pillars repeated spontaneously the *takbir* four times (expressed wonder).

(8) He who turned his face away from his place (grave) turned his back on the great Kaba.

(9) And he who bowed the head to him made him face bright as a mirror.

(10) Should you serve as sweeper of his place (grave) you are capable of the work of a hundred Messiahs.

(11) I searched for the date of this building, wisdom gave as inspiration. The dome of the Shaikh' (AH 1017 = AD 1608–9).

(12) May He Who built these seven green ceilings (heavens) increase the honour of its builder.'

III. Inscription on the second and fourth southern arches of the verandah, translation:

'In the reign of his Exalted Majesty Sahib Qirani Sani (the second Lord of happy conjunction), the most humble of men (named) Khalil-ullah Khan, son of Mir Miran Alhusaini Nimatullahi, who was the governor of Shahjahanabad, erected this verandah round the blessed tomb in the year 1063 (AD 1652–3).'

IV. Inscription on a marble tablet let into the western wall at the S.W. corner inside the tomb of Shaikh Nizamuddin, and composed by Alamgir II in Urdu, translation:

(1) 'He who becomes the slave of Nizamuddin with his heart receives the royal crown of the whole world.

(2) Azizuddin (known as Alamgir II) performed the services of a slave with true faith: the kingly crown of Hind (India) has now been given me (Azizuddin).

(3) Through him is healed my wounded heart without recourse to food, prayer, medicine or physician.

(4) Much afflicted are the people now, O! beloved of God (Nizamuddin). Confer favour on sinners, you who are a friend of God.

Under the supervision of Hoshiyar Ali Khan, the eunuch slave. The year 1169 (AD 1755–6).'

V. Inscription written in *nastaliq* characters on the marble balustrade round the grave of Shaikh Nizamuddin, translation:

'Offered by the slave of the slave and the devoted servant (named) Muhaiyud Din Bahadur Shamsul Umara Amir Kabir Khurshid Jah, on the 21st of the victorious month of Safar, the year 1300 Hijra (AD 1882–3).'

(*g*) The condition of the principal buildings surrounding the tomb of Nizamuddin is good, but the smaller structures round the *baoli* at the entrance are in need of attention, and a visit to the tomb would be rendered more pleasant by the absence of the numerous touts and beggars who generally infest the place. The area between the Kotla and the road leading to the tomb of Safdar Jang is very unsightly and is in need of improvement.

(*h*) Should be protected.

(*i*) The tomb of Shaikh Nizamuddin Auliya is one of the most sacred shrines in India. Since his burial, the enclosure named Yaran Chabutra, 'the platform of friends' in the vicinity of his tomb has been regarded with such sanctity that it has been selected by people of all classes for their last resting place; hence the whole interior of the enclosure is now a graveyard.

The tomb of Shaikh Nizamuddin has been considerably added to from time to time, as the inscriptions show, and of the original building which was repaired and decorated by Firoz Shah Tughlaq nothing now remains. In the year AH 970 (AD 1562–3) Faridun Khan erected the present building (Inscription I). The building measures 31' 9" square externally, the verandah, which is 6' 9" in width and paved with marble, having five arched openings on each side, the openings measuring alternately 5' 6" and 3' 3". The columns of the verandah carry trefoil arches which in turn support a red sandstone *chajja*. Above the latter is a *pinjra*

parapet overtopped by a series of dwarf domes, the corners of the parapet being emphasised by dwarf marble *chattris* with gilt finials. The arches of the verandah are usually hung with heavy cotton *pardahs*. The tomb chamber which measures 15' 8" square internally and 18' externally, is entered through a single door on the south side flanked by marble screens, and is lit by openings filled with marble *jali*-screens set in sandstone frames, also usually kept screened by *pardahs*. The flooring about the grave is of marble. The dome, which is of bulbous type, springs from an octagonal drum, and is ornamented by vertical stripes of black marble, and topped by the usual lotus-cresting which serves as a base for the gilded finial. At the head, and to the east of the grave, the wall contains three screens of marble lattice work, the centre screen being larger than those at either side, while in the centre of the western wall is a gilded *mihrab*. A cotton canopy hangs over the grave and silvered glass balls are suspended around it as ornaments, producing a very tawdry effect. The marble balustrade surrounding the grave is the gift of Khurshir Jah of Haidarabad. The grave, which bears no inscription, is of marble, and measures 8' 3" by 4' 4" by 1' 1" in height.

Firoz Shah's building seems to have been a domed chamber of which the walls were composed of pierced screens. These latter, like the doors, were of sandal wood, and Firoz Shah repaired them. He also hung golden cups on chains 'in the four recesses of the dome,' and erected a Jama'at Khana (congregational chamber) which had not existed before.

In AH 970 (AD 1562–3) Faridun Khan (Sayyid Farid Khan) erected the marble screens under the dome, as is testified by the inscription on the marble slab at the head of the grave (Inscription No. I). The next addition was the wooden canopy, inlaid with mother-of-pearl. This was erected in AH 1017 (AD 1608–9) by Farid Khan (Murtaza Khan), who held the rank of 5000 in the reign of Jahangir (Inscription II). Khalilullah Khan, entitled Umdatul Mulk, governor of Delhi in AH 1063 (AD 1652–3), who was raised in the first year of the reign of Aurangzeb to the rank of 6000, built the verandah round the tomb, the material used being red sandstone and marble (Inscription III).

In AH 1169 (AD 1755–6) Alamgir II erected the tablet bearing inscription IV, and possibly carried out other repairs and additions as well. In AH 1223 (AD 1808–9) Nawab Ahmad Bakhsh Khan of Firozpur replaced the red sandstone pillars of the verandah by pillars of marble, and the curious parapet with its line of miniature domes is no doubt of the same date. In AH 1236 (AD 1820–1) Faizullah Khan Bangash added the copper

ceiling, ornamented with blue enamel, to the verandah. The dome as it now stands is said to have been rebuilt by Akbar II in AH 1239 (AD 1823–4), the old masonry dome being removed.

Shaikh Nizamuddin, styled Sultanul Mashaikh is said to have been unequalled in the influence he exerted upon the varied classes of his co-religionists. His real name was Muhammad, son of Ahmad, and he was born in the month of Safar in the year AH 634 (AD 1236) at Budaun. He lost his father when five years old, and thereafter was brought up by his mother, coming to Delhi with her at the age of 25, and taking up his abode in the village of Ghiyaspur, near the tomb of Humayun. His mother soon afterwards died, and he became a disciple of Baba Farid Shakarganj who appointed him as his successor, bestowing upon him the gift of divination, and sent him to reside at Delhi. He combined the piety of a saint with the worldly wisdom of a politician and, to quote from Carr Stephen, his knowledge of human nature, not derived from the study of books, but the result of experience of human life, earned for him many a dubious compliment, from some of possessing a knowledge of sorcery, from others of being a member of the secret society of the Assassins of Khorasan; while according to Colonel Sleeman, at times a somewhat precipitate thinker, he was the organiser of Thagism. He was the friend of Alauddin Khalji and Muhammad Tughlaq, both of whom succeeded to the throne in circumstances of considerable suspicion, the first after the murder of his uncle, and the second after that of his father. He appears to have learnt in one of his trances the exact time of the death of the former; while his prophecy that Ghiyasuddin Tughlaq would never see Delhi again was fulfilled by the emperor being crushed to death in a temporary palace some four miles from his capital. In AD 1303 the Mughals, who were the cause of considerable anxiety to Alauddin Khalji, were dispersed it is said through the prayers of the saint or, as is more probable, were rendered ineffective by the assassination of their leaders by Nizamuddin's emissaries. His friends included Sayyid Mahmud Behar, the renowned saint 'Chiragh Dehlavi', and the poet Khusrau. He died at sunrise on the 18th Rabia II, AH 725 (April 3rd, AD 1325). . . .

(*a*) Majlis Khana (Assembly house).
(*b*) In the village of Nizamuddin, some 20 yards to the north of the tomb of Shaikh Nizamuddin.
(*c*) Pirzadahs or the descendants of Shaikh Nizamuddin.
(*d*) Mughal.
(*e*) None.
(*f*) Good.

(*g*) Unnecessary.
(*h*) The Majlis Khana measures 32' by 25' 2" and is two bays deep, with three arched entrances. It is built of red sandstone and is of no special interest.

(*a*) Enclosure of Nawab Mustafa Khan.
(*b*) In the village of Nizamuddin to the west.
(*c*) Nawab Ishaq Khan.
(*d*) Late Mughal.
(*e*) Modern inscriptions only.
(*f*) Good.
(*g*) Unnecessary.
(*h*) This enclosure is the family burial ground of Nawab Mustafa Khan, Jagirdar of Jahangirabad, Meerut district. It contains a small pavilion with arched entrances, and a large number of graves, of which a few bear modern inscriptions.

(*a*) Mosque known as Jamaat Khana (Congregation house).
(*b*) In the village of Nizamuddin, near the tomb of Shaikh Nizamuddin to the west.
(*c*) Waqf; Mutawalli Pirzadahs, or the descendants of Shaikh Nizamuddin.
(*d*) Alauddin Khalji's reign.
(*e*) On the eastern façade to the south of the central arch, giving the date of the death of Shaikh Nizamuddin, translation:

(1) 'The administrator (Nizam) of two worlds, the king of water and earth surely became a lamp for both the worlds.

(2) When I sought the date of his death from the invisible, the invisible crier said 'the emperor of religion' (AH 725 = AD 1325);'

(*f*) Good.
(*g*) Should be protected.
(*h*) This mosque, known as the Jamaat Khana (house of assembly), is the oldest monument found in the Nizamuddin group, and forms the western side of the enclosure surrounding the tomb of the Shaikh. Red sandstone is used throughout, and the overall measurements of the buildings are 95' 9" N. to S. and 56' 6" E. to W.; in height some 48', 33' to top of the roof and 15' more to the top of the main dome. The central compartment, measuring internally 38' 6" square, is rooted by a low dome diam. 37' 10" and was built during the lifetime of Shaikh Nizamuddin by Khizr Khan, son of Alauddin Khalji and

the hero of Amir Khusrau's love poem, entitled 'Khizr Khan and Deval Devi Rani'. The side rooms, each roofed by twin domes and measuring 53' by 19' internally, are later additions, probably dating from the reign of Muhammad Shah Tughlaq. The main entrance arch is framed in a band of Quranic inscriptions which are also found around the internal arches and *mihrabs*. The main dome springs from a polygonal drum, the top of which is encircled by a band of ornament of an interlacing pattern and capped by an elaborate *pinjra* cresting. The roof parapet is crowned by a battlement of the spear head pattern.

From the centre of the main dome hangs an inverted cup said to be of gold. The central room, built by Khizr Khan, is said not to have been originally intended for use as a mosque but as a tomb for the Shaikh Nizamuddin. The saint, however, for some reason or other, expressed the wish when he was about to die that his body should not be interred there. The building was later converted into a mosque by the addition of the two side compartments. The above-quoted inscription is comparatively modern, and does not throw any light on the history of the mosque.

Notes and References

1. In the conventional language of mystics the name Ghaus or Qutb is applied to the hierarchy of the saints, who is supposed to be pre-eminently endowed with sanctity and with miraculous faculties. At the death of such a saint his place is believed to be filled by another Ghaus.
2. A place towards which Muhammadans look during prayer, hence the most satisfying place.

CHAPTER I.8

Mosque of Shaikh 'Abdu-n Nabi*

MAULVI ZAFAR HASAN



At a distance of about a mile from the Delhi Gate to Shahjahanabad on the Delhi Muttra [Mathura] road there lies a mosque built by Shaikh 'Abdu-n-Nabi, the *ṣadr-us-ṣadur* or chief *Sadr* of Akbar. The mosque belongs to the style of early Mughal architecture exhibited in the Khairu-i-Manāzil,[1] and contains a central hemispherical dome without any flanking towers or *minārs* which 'were considered nearly indispensable in the buildings of the Mughals very shortly afterwards'.[2] It is constructed of rubble masonry rendered with plaster, and consists of an oblong hall measuring some 73 ft. north and south by 33 ft. east and west. The latter is divided into three compartments communicating with each other by archways. The eastern façade is relieved by three pointed arches, the central of them, which is the highest, being 28 ft. 8 inches in height and 19 ft. 1 inch in width. Recessed deeply from these are the actual entrance to the prayer chamber consisting of pointed arches each 15 ft. 6 inches high and 11 ft. 1 inch wide. The spandrels of all arches were ornamented with circular bosses of plaster incised with the Muhammadan creed or geometrical patterns bordered with floral designs, but excepting a few which are extremely faded, they have all disappeared.

The central compartment, which is covered by a dome, is 24 ft. 2 inches square. At the height of 25 ft. 3 inches from the floor the square is brought to an octagon by the usual arched pendentives, the sides

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facing north, south, and west being pierced with arched windows, and some 11 ft. higher up the dome springs from a sixteen-sided drum. It rises 15 ft. above the drum and is crowned by a plaster lotus cresting. The inner west wall of the prayer chamber is provided with three prayer niches or *mihrāb*s corresponding to the three outer openings.

The soffits of the central dome as well as of the vaults which cover the side apartments, are ornamented with incised plaster, but the principal feature of ornamentation is the many-coloured tiles, set in pleasing designs which embellish the *mihrāb*s. Circular tile discs inscribed with the name of God or the Muhammadan creed are also to be found on the walls and the spandrels of the eastern arch inside the central apartment. These details of ornamentation are, however, fast disappearing, and to a certain extent have already vanished. The mosque is in an advanced stage of decay and, according to the opinion of the late Mr Gordon Sanderson, Superintendent, Muhammadan and British Monuments, Northern Circle, is too ruined for repairs. Its end rooms probably intended for the use of *mullah*s or the priests of the mosque, as well as the walled courtyard measuring some 76 ft. by 79 ft. and entered by a doorway on the east have almost completely disappeared and can only be traced by remains of foundations or accumulated debris.

The inscribed marble tablet measuring 3 ft. 6 inches by 2 ft. 2 inches and recently removed, for safe custody, to the Delhi Museum of Archaeology,[3] previously occupied the centre of the outer main arch of the prayer chamber. The inscription consisting of five lines of Arabic Persian[4] poetry is written in *Naskh*.

Its translation reads as follows:

(1) 'During the reign of the Emperor Akbar, may God perpetuate his beneficent person,
(2) A sacred edifice, like which there is none in the regions, was built,
(3) By the Shaikhu-l-Islam,[5] the pilgrim of Mecca and Medina and the universally acknowledged chief of the learned in the sayings of the Prophet,
(4) (Named) Shaikh 'Abdu-n-Nabi Bu'mani,[6] the mine of learning and the spring of beneficence.
(5) The date of the foundation of this edifice Faizi inquired of wisdom. It answered "The best place."
Written by Naqshabi.'

The inscription composed by Faizi, Akbar's poet laureate and personal friend, contains his name and furnishes a good example of his skill in

Arabic literature and poetry. Perhaps the chief merit lies in the chronogram, of which the numerical value is AH 983 (AD 1575–6) and which is the beginning of a *hadīth*[7] in praise of mosques and therefore a most suitable chronogram for a mosque.

It may be recalled that Faizi, before he rose to power and opulence, was treated on one occasion with great contumely and even expelled by Shaikh 'Abdu-n-Nabi from his court when the former presented himself accompanied with his father before him and applied for a grant of 100 *bigha*s of land.[8] Faizi is said to have been instrumental in subsequently bringing about the downfall of the Shaikh[9] not more than four years after he had composed this inscription, wherein he had so profusely extolled the Shaikh for his liberality and learning.

Shaikh 'Abdu-n-Nabi, the founder of the mosque, was the son of Shaikh Ahmad, son of Shaikh 'Abdu-i-Quddus of Gangoh, one of the greatest and best known saints of India. He went several times to Mecca and Medina and studied *hadīth*, and in the year AH 971 (AD 1563) was made chief *Sadr* by Akbar.[11] Soon after the appointment Shaikh 'Abdu-n-Nabi acquired almost absolute powers, and is said to have become arbitrary.[12] Badaoni's account of his life is very inconsistent, for in some passages he is lavish in praise of the Shaikh's liberality,[13] piety and learned attainments,[14] while in others he decries him as haughty and uncivil in his behaviour towards the learned and doctors of religion, mean in the matter of making grants to the latter,[15] and incapable of understanding even the most familiar *hadīth*.[16] 'Abdu-n-Nabi was in the heyday of his prosperity at the date of the building of this mosque. The emperor who held him in considerable reverence and esteem repaired to his house from time to time to hear lectures on *hadīth*, and is even said to have placed the Shaikh's slippers before his feet.[17] Akbar also sent the eldest prince (Jahangir) to his school in order to learn the collection of Forty *hadīth* compiled by the renowned master Maulana 'Abdu-r Rahman Jami.[18] But at length, owing to the enmity of Maulana 'Abdullah Ansari, entitled the *Makhdumu-l Mulk*, and certain others who were jealous of him, he lost the favour of the Emperor,[19] another and perhaps the chief reason being the execution of a Brahman of Muttra[20] who was accused of having used the building material of a mosque in constructing a temple and of having reviled the Prophet and Muhammadans publicly. The story is related with details by Badaoni.[21]

Later on in the year AH 987 (AD 1579–80) Shaikh 'Abdu-n-Nabi and his veteran enemy the *Makhdumu-l Mulk* were reported to have declared that it was not of their free will but under compulsion that they had

affixed their seals to the document which invested the Emperor with the supreme authority in religious affairs. The Emperor got rid of them by sending them away to Mecca, with the order not to return until sent for, the former having been appointed chief of the caravan of pilgrims and entrusted with the money sent to the deserving people there. But the news of the insurrection of Mirza Muhammad Hakim infused the two exiles with wild and undefined hopes, who forthwith, inspite of the admonitions of the Sherif of Mecca and in direct contravention to the injunctions of the Emperor, embarked for home and landed in Gujarat in AH 990 (AD 1582). The *Makhdumu-l Mulk* died at Ahmadabad, but 'Abdu-n-Nabi received orders to attend the royal presence.[22] On his arrival at Fathpur, an account of 70,000 rupees which the Emperor gave him when he set off for Mecca was demanded of him, and with a view to make him settle it, he was made over into the custody of Raja Todar Mal, and for some time was imprisoned like a defaulting tax-gatherer in the counting-house of the office, where one night a mob strangled him.[23] Another historian[24] says that 'Abdu-n-Nabi was handed over to Abu'l Fazl who either strangled him owing to previous enmity, or let him suffer a natural death. His death occurred in the year AH 992 (AD 1584).

Notes and References

1. A mosque built by Maham Anagah, the wet nurse of Akbar and the mother of Adham Khan, in the year AD 1561. It lies between 2 and 3 miles from Delhi on the Muttra road [vide Carr Stephen, *Archaeology and Monumental Remains of Delhi* (Allahabad, 1879), pp. 199–200].
2. J. Fergusson, *History of Indian and Eastern Architecture* (London, 1910), part II, p. 220.
3. *Catalogue of the Delhi Museum of Archaeology* (Calcutta, 1913), p. 8, c. 40.
4. The whole inscription is in pure Arabic except the first hemistich of the last verse which is [in] Persian.
5. The head of religion, i.e., the highest priest.
6. Nu'mani. The title borne by the descendants of Nu'man Ibn-i Thabit, better known as Abu Hanifa, one of the four great propounders of the Muslim law, called the Imams. He is also known as Imam-i-Azam.
7. *Hadith* is a particular branch of Islamic literature consisting of the sayings of the Prophet. The *hadīth* alluded to is 'The best place is a mosque and the worst a market'.
8. Abul Fazl. *Ain-i Akbari*, tr. by H. Blochmann (Calcutta, 1866–7), vol. I, p. 490.
9. Ibid., p. 491.
10. Badaoni, *Muntakhabu-t Tawarikh*; Persian text (Calcutta 1864–9), vol. III, pp. 79–80; Shah Nawaz Khan, *Maathiru-l Umara*, Persian text (Calcutta, 1887–96), vol. II, pp. 560–1.

11. *Muntakhabu-t Tawarikh*, vol. II, p. 71. During Akbar's reign the *ṣadr* ranked as the fourth officer of the empire, the first three being the *vakil*, *vazir* and *bakhshi*. The *ṣadr* was the highest legal officer, and had powers similar to those of an Administrator-General. He was in charge of lands devoted to ecclesiastical and benevolent purposes and possessed an almost unlimited power of conferring such lands independently of the king. He was also the highest officer of ecclesiastical law and could exercise inquisitorial powers. The *Qazi* and the *Mir 'Adl* were under his orders and he was assisted in his important duties by a clerk who looked after the financial business and was styled the *Diwan-i-Sa'adat*. (*Muntakhabu-t Tawarikh*), vol. II, p. 70; *Ain-i Akbari*, vol. I, p. 546.
12. *Ain-i Akbari*, vol. I, p. 546.
13. *Muntakhabu-t Tawarikh*, vol. II, p. 71.
14. Ibid., vol. III, p. 80.
15. Ibid., vol. II, pp. 204–5.
16. Ibid., vol. II, p. 204.
17. Ibid., vol. II, p. 204; vol. III, p. 80; *Ain-i Akbari*, vol. I, p. 271.
18. *Muntakhabu-t Tawarikh*, vol. II, p. 204.
19. *Muntakhabu-t Tawarikh*, vol. III, p. 80.
20. *Ain-i Akbari*, vol. I, p. 546.
21. *Muntakhabu-t Tawarikh*, vol. III, pp. 80–2.
22. *Maathiru-l Umara*, vol. II, pp. 563–4; vol. III, p. 256.
23. *Muntakhabu-t Tawarikh*, vol. II, p. 311.
24. *Maathiru-l Umara*, vol. II, p. 564.

CHAPTER I.9

Symbolism of the Dome*

ANANDA K. COOMARASWAMY

I



The origin of any structural form can be considered either from an archaeological and technical or from a logical and aesthetic, or rather cognitive, point of view; in other words, either as fulfilling a function or as expressing a meaning. We hasten to add that these are logical, not real distinctions: function and significance coincide in the form of the work; however, we may ignore the one or the other in making use of the work as a thing essential to the active life of the body or dispositive to the contemplative life of the spirit.

Inasmuch as we are here mainly concerned with significance, we need not emphasise the importance in architectural history of the problem presented by the superposition of a domed (or barrel-vaulted) roof upon a rectangular base, nor go into the question of how, where homogeneous materials such as mud or wattle were in use, this was originally very simply solved (and even more easily in the case of a tent of skins or woven material) by a gradual obliteration of the angles as the walls were built up; and how subsequently where stone or brick was employed, the same problem was solved in two ways structurally, either by spanning (trabeation, squinches) or by building forward from the angles (corbelling, pendentives). We propose to ask rather *why* than *how* 'the square chamber is *obliged* to forsake its plan and strain forward to meet the round dome in which it must terminate',[1] and whether it is altogether accidentally, so to speak, that our domes 'appear to have been *destined*

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to symbolise the passage from Unity to quadrature through the mediation of the triangle of the squinches';[2] and why in the north porch of the Erectheion 'immediately above the trident-mark (of Poseidon) an opening in the roof had been *purposely* left.'[3] We might have expressed the problem otherwise by asking 'Why should the walls of a tepee or sides of a pyramid contract towards a common point in which their independent existence ceases?'; or again, in the case of a dome supported by pillars, by asking, 'Why should these pillars either actually (as in the case of certain bamboo constructions) or virtually (as is evident if we consider the arch as a dome in cross-section) converge towards the common apex of their separated being, which apex is in fact their "*key*"?'

In this matter of procedure from unity to quadrature there is something analogous to the work of the three Ṛbhus in making four cups out of Tvaṣṭṛ's one. These Ṛbhus compose a triad of 'artists',[4] who are described as 'Men of the interspace, or air' (*antarikṣasya narāḥ*), and are said to have quartered the Titan's cup (*camasam, pātram*), 'as it were measuring out a field' (*kṣetram iva vi mamuḥ, Ṛgveda*, I.110.3–5). The reference is undoubtedly to the primordial act of creation by which a 'place' is prepared for those who are eager to emerge from the antenatal tomb, to escape the bonds of Varuṇa. Attention may be called to the expression *vi mamuḥ*, from *vi mā*, to 'measure out' or 'lay out', and hence to 'plan' or even 'construct'. The root with its prefix occurs notably in the word *vimāna* which often coincides with *ratha* (chariot) as the designation of what is at once the 'palace' and the 'vehicle' of the God (i.e. the revolving universe),[5] and which occurs in *Ṛgveda* chiefly in connection with the creative determination of 'space' (*antarikṣa, rajas*), for example in v.41.3 where Somāpūṣaṇā, described as the Poles of the Universe, are besought to 'urge your chariot hitherward, the seven-wheeled chariot that measures out the region' (*rajaso vimānam . . . ratham*), that is to say, are asked to bring into being an inhabitable space. In countless texts we find *vi mā* employed in this way with respect to the delimitation of space, the laying out of 'abodes of cosmic order' (*ṛtasya dhāma*), and the determination of the 'measure of the sacrifice' (*yajñasya mātram*) which is again an aspect of the act of creation. In v.81.3 it is the Sun himself that 'measures out the chthonic regions' (*pārthivāni vi mame . . . rajāṃsi deva savitā*), i.e. the 'grounds' of the seven worlds; or otherwise expressed, it is Varuṇa who 'employing the Sun as his rule, measures out the earth' *mānêneva . . . vi . . . (mame pṛthiviṃ sūryeṇa*, v.85.5);[6] and we may say in the words of *Genesis*, II, 1, that 'thus the heavens and the earth were finished, and all the host of them'.

Our citations above have been chosen in part to bring out the connection of the Sun with the act of creative delimitation by which the Three (or Seven, or Thrice Seven) Worlds are made actual. For we must assume from *Ṛgveda*, I.110.3 and 5 that the 'Asura's cup' made fourfold by the Ṛbhus is really the 'platter' or disc (*pātra = maṇḍala*) of the Sun (or rather, *ante principium*, that of the United Sun and Moon, Heaven and Earth, coincident in the beginning as they are at the end of time): we remark not merely the appositional sequence 'Savitṛ (the Sun) . . . him-that-may-not-be-hidden . . . *this* only feeding vessel of the Titan (Father)' (*savitā . . . agobyam . . . camasam asurasya bhakṣaṇam ekaṃ santam*, I.110.3, with *pātram* for *camasam*, in verse 5)[7] and in *Atharvaveda*, X.8.9 'bowl wherein is set the glory omniform' (*camasa . . . yasmin yaśo nihitaṁ viśvarūpam*), but also the later designation of the sun-door as an 'entrance covered over by the golden platter of truth' (*hiraṇyamayena pātreṇa satyasyāpihitaṁ mukhaṁ*),[8] *Īśā Upaniśada*, 15, cf. *Jaiminīya Upaniśada Brāhmaṇa*, I.3.6).

It is then, by means of the Sun, often described as the Titan's 'eye', that He surveys, experiences, and 'feeds upon' the worlds of contingent being under the Sun, which are in the power of Death, and properly His food; by means of the Sun that these worlds are in the first place 'measured out', or 'created'. It is just this that is implied in the work of the Ṛbhus, who make of the single solar 'platter' four of the like sort, by which we can only understand four solar stations, representing the limits of the solar motion in the four directions (motion daily from East to West and back again, and annually from South to North and back again). It will then be a matter of obtaining 'food from all four quarters' (*Pañcaviṁśa Brāhmaṇa*, XV.3.25): this may seem from a human point of view a great thing, but it can be easily seen that it is far more in accordance with the dignity of the divine unity to obtain all possible kinds of 'nourishment' from a single source, a veritable cup of plenty, than to obtain these varied foods from widely extended sources: what Tvaṣṭṛ resents is in effect the partition of his central unity involved by an extension in the four directions. If all this is attributed in *Ṛgveda* either to the Deity in person, or alternatively to a subsequently deified triad of 'artists', this can only be understood to mean that the latter are collectively the three dimensions of space, and in this sense 'powers' whose operation is indispensable to the extension of any horizontal 'field' in terms of the four quarters: it is in fact only by means of the three dimensions that an original 'one' can be made 'four', 'like a field' (*kṣetram iva*), and it is in this sense that we proceed from unity to quadrature by means of a triangle.[9] The converse procedure is given in the well-known miracle of the Buddha's

begging-bowl (*patta = pātra, Jātaka*, I.80); that the Buddha receives four bowls from the Kings of the Four Quarters, and making of these four one bowl, eats from it, implies an involution of space, and what is evidently and literally an atonement of what had been done by the Ṛbhus. For the Buddha, now a unified being, the Grail is once more as it had been in the beginning and for Tvaṣṭṛ, single.

Thus considered, the 'myth' of the Ṛbhus may be called a paraphrase of a more usual formula according to which the Sun is described as seven-rayed;[10] of which seven, six represent the arms of the three-dimensional Cross of Spiritual Light (*trivṛd vajra*) by which the universe is at once created and supported.[11] Of the six rays, those which correspond to the Zenith and Nadir coincide with our Axis of the Universe (*skambha, divo dharuṇa*, etc.), Islamic Qutb, and Gnostic *stauros*, while those which correspond to North and South, East and West, determine the extension of any horizontal plane or 'world' (*loka*, precisely as the *locus* of a specific ensemble of possibilities), for example, that of each of the seven worlds considered as a given plane of being. The seventh ray alone passes *through* the Sun to the supra-solar Brahma worlds 'where no sun shines' (all that is under the Sun being in the power of Death, and all beyond 'immortal'); and is represented accordingly in any diagram by the point at which the arms of the three-dimensional cross intersect, or as Mahidhara expresses it, 'the seventh ray is the solar orb itself'. It is by this 'best ray', the 'one foot' of the Sun, that the 'heart' of each and every separated essence is directly connected with the Sun: and it will prove to be significant in our interpretation of the summit of the dome that when the separated essence can be thought of as returned to the centre of its own being on whatever plane of being that this seventh ray will evidently coincide with the axis of the Universe. In the case of the Buddha's 'First Meditation',[12] it is evidently just because he is for the time being completely reverted and thus analogically situated at the 'navel of the earth' the nether pole of the Axis, that the Sun above him casts an unmoving shadow, while the shadows of other trees than the one under which he is seated change their place. We need hardly say that the position of the Axis of the Universe is a universal and not a local position: the 'navel of the earth' is 'within you', else it were impossible to 'build up Agni intellectually', as the *Śatapatha Brāhmaṇa* expresses what is formulated in Christianity as the 'bringing to birth of Christ in the soul'. In the same way the centre of every habitation is analogically *the* centre, an hypostasised centre, of the world, and immediately underlies the similarly hypostasised centre of the sky at what is the other pole of the Axis at once of the edifice and of the universe it represents.

Every house is therefore the universe in a likeness, and provided with an analogous content: as Mus expresses it, 'The House and the World are two equivalent sums . . . The family living in it is the image of the countless crowd of creatures dwelling in the shelter of the cosmic house; of which the ceiling or roof is heaven, light, and sun.' The work of the architect is really an 'imitation of nature in her manner of operation': the several houses reflect in their accidents the peculiarity of as many builders, but are essentially 'so many hypostases of one and the same world and all together possess but one and the same reality, that of this universal world'.[13]

What we have said with respect to the house applies with equal force to many other constructions, of which we may cite the chariot as a notable example. No less precisely than the house, the chariot reproduces the constitution of the universe in luminous detail. The human vehicle is an exemplary likeness of the cosmic vehicle or body in which the course is run from darkness to light, from endless end to endless end of the universe, conceived at once in terms of space (and in this sense as stable) and in terms of time (as the Year, and in this sense revolving).[14] The paired wheels of this cosmic vehicle or universal incarnation of the Spirit, its driver, are respectively Heaven and Earth, at once divided and united by the axle-tree, on which the revolution of the wheels takes place (*Ṛgveda*, x.89.4). This axle-tree is the same thing as our Axis of the Universe, and trunk of the Tree, and the informing principle of the whole construction. The division of the wheels which is the act of creation, brings into being a space within which the individually proceeding principles are borne on their way; while their reunion, realised by the charioteer when he returns from the circumference to the centre of his own being, is the rolling up of time and space, leaving only a single wheel in principle (Dante's *prima rota*), of which the hub is that solar gate 'through the midst of which one escapes altogether' (*atimucyate, Jaiminiya Upaniśada Brāhmaṇa*, i.3.5) from the revolving cosmos into an uncontained empyrean. Nothing will be changed in principle if we take account in the same way of the exemplary likeness of ships to the cosmic Ship of Life in which the Great Voyage is undertaken; the deck corresponding to the surface of the earth, the mast coinciding with the vertical axis of the house and axle-tree of the chariot, while the 'crow's nest' corresponds to the seat of the all-seeing Sun above.

All that we have implied, here and elsewhere, with respect to the imitation of heavenly prototypes in human works of art, and the conception of the arts themselves as a body of transmitted knowledge of ultimately

superhuman origin, can be applied equally to the case of the artificer himself just as also in Christian philosophy there is taken for granted an exemplary likeness of the human architect to the Architect of the World, and as indeed the consistency of the doctrine requires. If we consider such an architectural treatise as the *Mānasāra*, we find in the first place clear evidence of a direct dependence upon Vedic sources, for example, in the statement that the master-architect (*sthāpati*) and also his three companions or assistants, the surveyor (*sūtra-grāhī*), the builder and painter (*vardhakī*), and carpenter (*takṣaka*) are required, by way of professional qualification, to be acquainted both with the *Vedas* and with their accessory sciences (*sthapatiḥ . . . vedavic-chāstra-pāragaḥ*, loc. cit., ii.13 and f.), and in such verses as 'It is through the Sun that the Earth becomes the support of all beings' (*ib.* iii.7), evidently an echo of *Ṛgveda* v.85.5 cited above.[15] Furthermore, 'It has been said by the Lord himself that he is the All-fashioner (Viśvakarmā)' (*ib.* ii.2); and it is from his four 'faces' that are descended the quartet of architects mentioned above, who are moreover called 'all-fashioners' after him (*ib.* ii.5). It may be added that evidently the 'four architects' correspond to the four ritual priests of the sacrifice, the *sthāpati* in particular to that one who is styled pre-eminently the *Brāhmaṇa*, as distinguished from the others by his greater knowledge, without which their operation would be defective. In our *Medieval Sinhalese Art* we have called attention to the sacerdotal and regal functions performed even by the modern *sthāpati* in Ceylon. A similar analogy could be drawn between the 'four architects' on the one hand, and the Sun or solar Indra with his particular associates, the Ṛbhus. And finally, the designation of the master-architect, as *sthāpati* immediately suggests *vi . . . atiṣṭhipaḥ* in *Ṛgveda*, i.56.5–6, where it is a matter of the architectural construction of the universe, with its axial 'pillar of heaven' (*divo dharuṇam*, cf. ix.73.7 where Soma as the Tree of Life is *aharuṇaḥ mahaḥ divaḥ*, 'the great stauros of the sky'), and rigid crossbeam (*tiro dharuṇam acyutam*): *sthāpati* and *atiṣṭhipaḥ* being equally causative forms of *sthā* in the sense 'to set up'. *Ṛgveda*, i.56 at the same time makes a direct connection between the construction of the universe and the smiting of the Serpent, Ahi-Vṛtra, the significance of which will appear later. We may say that just as much as the sacrifice itself (a synthesis of all the arts), every artistic operation, as such operation is envisaged by tradition, is an imitation of what was done by the Gods in the beginning.

The questions of the Ṛbhus and of the Cross of Light have been introduced into our discussion of the principles of sacred architecture (from

the traditional point of view, there is nothing that can be defined as essentially or wholly secular) primarily in order to provide a background illustrative of the manner in which the problems of spatial extension and construction have been traditionally approached. Our method of approach is based upon the fact that the technical problem as such only presents itself when there has already been imagined a form to be realised in the material. Whether we have in view a spatial universe or a human construction, the idea of a space to be enclosed between a vault above and a plane below must be assumed in the mind of the architect logically prior to any actual becoming of the work to be done; which priority will be merely logical in the case of the Divine Architect, but must be also temporal in the case of the human builder who proceeds from potentiality to act. And prior to this formal cause, with the same reservations, there must be assumed a final cause or purpose of the construction to be undertaken, the artist always working both *per artem et ex voluntate*. The same will hold good whether we take account of the house of the body, a constructed dwelling, or the universe as a whole. Just as formally considered there is a correspondence between the human body,[16] human building, and whole world, so there is also a teleological correspondence: all these constructions have as their practical function to shelter individual principles on their way from one state of being to another to provide, in other words, a field of experience in which they can 'become what they are'. The concepts of creation (means) and of redemption (end) are complementary and inseparable: the Sun is not merely the architect of space, but also the liberator of all things thereinto (which would otherwise remain in an obscurity of mere potentiality), and finally of all things thereform.

It can be said with respect to any of these houses to which we have referred that one enters into the provided environment at its lowest level (at birth) and departs from it at its highest level (at death); or in other words that ingress is horizontal, egress vertical (these are the two directions of motion on the wheel of life, respectively peripheral and centripetal). If this is not empirically evident in all respects,[17] this is nevertheless an accurate presentation of the traditional concept of the passage of any individual consciousness through any 'space'; and this is a matter of importance, because it is precisely in the notion of a vertical egress that we shall find an explanation of the symbolism of our domes.

We are not then disposed to enquire whether or not, or whether to some extent, the form of a stūpa may or may not have been derived from that of a tumulus or domed hut (we agree in fact with Mus in rejecting

such a theory of origins), but rather to seek for what may be called the common formal principle that finds expression equally in all of these and in other related constructions. We propose to consider the architectural form primarily as an imagined (*dhyātam*)[18] form, referring its 'origin' rather to 'Man' universally, in whom the artist and the patron are one essence, than to this or that man individually. It need hardly be said that the traditional theory of art, and the Indian tradition in particular, invariably assumes an 'intellectual operation' (*actus primus*) preceding the artist's manual operation. We have discussed this elsewhere in connection with the later sources,[19] but may remark that the principle is clearly expressed in Indian texts from the beginning by the constant employment of the roots *dhī* or *dhyai*[20] and *cit* or *cint* in connection with all kinds of constructive operation, such as the fashioning of an incantation or that of a chariot or altar. For example, in *Ṛgveda*, III.2.1 the priests are said to bring Agni anigh 'by contemplation' (*dhiyā*), 'even as it is by contemplation that the tool gives form to the chariot': *Atharvaveda*, X.1.8 where we find the image 'even as by Ṛbhu the parts of a chariot are put together, by means of a contemplation' (*dhiyā*), and *Śatapatha Brāhmaṇa*, VI.2.3.1 (and *passim*) where in connection with the building of the Fire Altar, whenever the builders are at a loss, not knowing how to build up the next course of the structure, we find a sequence of words in which they are enjoined to 'contemplate' (*cetayadhvam*) and are then described as 'seeing' (*apaśyan*) the required form. It is thus not by means of the empirical faculties, nor so to say experimentally, but intellectually that the formal cause is apprehended in an imitable form. We are considering the dome accordingly primarily as a work of the imagination, and only secondarily as a technical achievement.

Man has always, in a manner that we have tried to indicate above, correlated his own constructions with cosmic or supramundane prototypes. As Plotinus expresses it, 'The crafts such as building and carpentry which give us matter in wrought forms may be said, in that they draw on pattern, to take their principles from *that* realm and from the thinking *there*' (*Enneads*, V.9.11). For example, the Indian seven-storeyed palace (*prāsāda*) with its various floors or 'earths' (*bhūmi*) has always been thought of as analogous to the universe of seven worlds; and one mounts to the top storey as if to the summit of contingent being (*bhavāgra*), just as the Sun ascends the sky and from his station in the zenith surveys the universe. It has been pointed out by Mus, in his magnificent monograph on Barabuḍur, from which we have quoted above, that the stūpa, particularly when monolithic, is essentially a domed *form*

rather than a domed construction, and therefore, necessarily to be understood rather from a symbolic than from a practically functional point of view; it represents a universe in parvo, the abode of a person who has passed away, analogous to the universe itself considered as the body or abode of an active 'Person'. In the same way the Christian church, functionally adapted to the uses of liturgy, which are themselves entirely a matter of symbolic significance, derives its form from an authority higher than that of the individual builder who is its responsible architect just as also in the case of the painted icons. 'That art alone belongs to the painter; the ordering and the composition belong to the Fathers' (Second Council of Nicea). In the same way the Indian architect 'should reject what has not been prescribed (*anuktam*), and in every respect perform what has been prescribed' (*Mānasāra*); just as it is stated in connection with images that 'the beautiful is not what pleases the fancy, but what is in agreement with the canon' (*Śukranītisāra*, IV.4.75 and 106) the function of which canon is to provide the support for the contemplative act in which an imitable form is visualised (*ib.* 70, 71).[21]

Before proceeding to a more detailed consideration of the ideology expressed in Indian domed constructions, and in what may be termed the archetypal form of any edifice, we must point out that what has been said by Mus for the stūpa and for the palace, 'this Buddhist monument is comprehensible primarily with respect to its axis' and 'we say of the *prāsāda*, as of the stūpa, that it is to be understood with respect to its axis, and that all the rest is only accessory decoration',[22] is of universal application.[23] This is sufficiently evident in the case of a domed hut of which the roof is actually supported by a king-post, thought of not merely as connecting the apex of the roof with a tie-beam, but as extending from the apex to the ground. We wish to point out, however, that while huts of this type have certainly existed, and that similarly at least in some cases (e.g. at Ghaṇṭasālā) the axis of the stūpa was actually and structurally represented within it, the importance of the axis in principle is no more necessarily represented by an actual pillar within the building than it would be possible to demonstrate the empirical existence of an Axis of the Universe, which axis is indeed always spoken of as a purely spiritual or pneumatic essence. On the other hand, we do find that the prolongations of the axis above the roof and below the ground are materially represented in actual construction; above, that is, by a finial, which may be relatively inconspicuous, but in many stūpas extends upwards in the form of a veritably 'sky-scraping' mast (*yaṣṭi*) or 'sacrificial-post' (*yūpa*) far beyond the dome; and below the floor of the contained space

by the peg of *khadira* wood driven into the ground and by which the head of the all-supporting Serpent is fixed.[24] In any traditional society, every operation is in the strictest sense of the word a rite, and typically a metaphysical rather than a religious (devotional) rite; and it is of the very nature of the rite that it is a mimesis of what was done 'in the beginning'. The erection of a house is in just this sense an imitation of the creation of the world; and it is in this connection that the transfixation of the head of the Serpent, alluded to above, and regarded as an indispensable operation, acquires an intelligible meaning. In modern practice 'the astrologer shows what spot in the foundation is exactly above the head of the snake that supports the world. The mason fashions a little wooden peg from the wood of the Khadira tree, and with a cocoanut drives the peg into the ground at this particular spot, in such a way as to peg the head of the snake securely down . . . if this snake should ever shake the world to pieces'. A foundation stone (*padma-śilā*), with an eight-petalled lotus carved upon it, is set in mortar above the peg. A Brahmin priest assists at all these rites, reciting appropriate incantations (*mantras*).[25] As Mus very justly adds to this citation, "If one performs in this way what is apparently a sacrilege, it is with a view to avoiding such quakings of the earth as might be caused if the Serpent should move its head'.[26] A very striking example of the rite is to be found in the 'Ballad of the Iron Pillar' at Delhi: 'All above a polished shaft, all a piercing spike below. Where they marked the Nāga's head (*Śeṣa*'s in subsequent verse), deep the point was driven down. . . . Soon a castle clothed with might round the iron pillar clomb; soon a city . . .'; but when at the instigation of an enemy of the royal 'house', the bloody point is afterwards withdrawn,[27] 'Sudden earthquakes school the plain'.[28]

The earth was originally insecure, 'quaking like a lotus leaf; for the gale was tossing it hither and thither. . . . The Gods said, 'Come, let us make steady this support' (*Śatapatha Brāhmaṇa*, II.1.1.8–9).[29] The architect who drives down his peg into the head of the Serpent is doing what was done by the Gods in the beginning, what was done for example by Soma when he 'fixed the miser' (*paṇim astabhāyat*, *Ṛgveda*, VI.44.22), and 'made fast the quaking Earth' (*pṛthivīṁ vyathamānām adṛṁbhat*, *Ṛgveda*, II.12.2), and by Indra when he 'smote the Serpent in his lair' (*ahim . . . śayathe jaghāna*, *Ṛgveda*, VI.17–19); and what has been done, and is done, by every solar hero and Messiah when he transfixes the Dragon and treads him underfoot.

In conclusion of the present introduction a word may be said on the principle involved in the symbolic interpretation of artefacts. The modern

critic is apt to maintain that symbolic meanings are 'read into' the 'fact' which 'must' originally have had no meaning, but only a physical efficiency. Nor could any objection be made to this if it were a matter of such absurdities of 'interpretation' as are involved in an explanation of Gothic arches as imitated from the interlacing branches of forest trees, or implied in the designation of certain well-known classical ornaments as 'acanthus' and 'egg and dart' motifs. Far from such sentimental fancies, a correct symbolic exegesis must be founded on a real knowledge of the principles involved, and supported by cited texts, which are just as much facts as the monuments themselves. The modern critic is apt, however, to go further, and to argue that even the oldest citable texts are already 'meanings read into' still older forms, which perhaps had originally no intellectual significance whatever, but only a physical function.

The truth is, however, that it is precisely in adopting *this* point of view that we are reading our own mentality into that of the primitive artificer. *Our* division of artefacts into 'industrial' and 'decorative', 'applied' and 'fine' art, would have been unintelligible to the primitive and normal man, who could no more have separated use from meaning than meaning from use; as Mus remarks, 'The true fact, the only fact of which the builders were aware, was a combination of both';[30] in primitive and traditional art the whole man finds expression, and therefore there is always in the artefact 'a polar balance of physical and metaphysical', and it is only on their way down to us that the traditional forms 'have been more and more emptied of content'.[31] The primitive artefact can no more be fully explained by our economic determinism than it can be by our aestheticism; the man who did by thinking, and thought by doing, was not as we are solely concerned about physical safety and comfort, but far more self-sufficient; he was as profoundly interested in himself as we are now-a-days in our bodies. . . .

II

We shall take it for granted that the reader is familiar with our 'Pāli *kaṇṇikā* = circular Roof-Plate', *JAOS*, 50, 1930, pp. 238–43. To what has been said there we wish to add in the first place that it can hardly be doubted that the *kaṇṇikā* or roof-plate of a domed structure, the meeting-place of its converging rafters, had almost certainly, as the term itself suggests, the form of a lotus, and that this lotus was in effect the Sun, 'the one lotus of the zenith' (*Bṛhadāraṇyaka Upaniśada*, VI.3.6), to be correlated with the 'lotus of the earth' and womb of Agni below:

and secondly that the expression *vijjhitvā* (Skr. root *vyadh*), *Jātaka*, I.201, implies a central perforation of the *kaṇṇikā-maṇḍalam* which was itself an image of the disc of the Sun (*sūrya-maṇḍalam*), and at the same time constituted what may have been called the 'eye' of the dome, although for this we have no Indian literary evidence beyond the use of 'eye' for 'window' in the word *gavākṣa* (literally 'bull's eye'), and the expression 'eye of a lotus' (*puṣkarākṣa*) occurring in Pāṇini V.4.76. We need hardly say that 'Sun' and 'Eye' are constantly assimilated notions in Vedic mythology, and that it is from the same point of view that the Buddha is frequently called the 'Eye in the World' (*cakkhumāloke*).[32]

A majority of existing domes are in fact provided with an apical aperture, called the 'eye of the dome': Gwilt's *Architectural Glossary*, defines 'eye' as 'a general term signifying the centre of any part. The eye of a dome is the horizontal aperture in its summit. The eye of a volute[33] is the circle in its centre.'

'On the Acropolis of Athens. . . . In the north porch of the Erectheion are the marks of a trident. In examining the roof of this north porch it has been found that immediately above the trident-mark an opening in the roof had been purposely left: the architectural traces are clear.'[34] The Roman Pantheon was lighted by an enormous eye, open to the sky, making the structure in fact hypaethral. More often the eye of a dome is comparatively small, and opens into a 'lantern' above the dome, which lantern admits light but excludes rain. In the case of the stūpa there is likewise an opening at the summit of the dome, the purpose of which is to serve as a place of insertion or socket for the mast that overstands the dome, and which is therefore also an 'eye'.

In any case, and whether an opening or a socket, the aperture can be regarded as at the same time functional (source of illumination, mortice, etc.) and as symbolic (means of passage from the interior to the exterior of the dome). It may be further observed that the eye in a roof is also a louvre or luffer permitting the escape of smoke from the central fire beneath it.[35] That the eye or luffer thus functions as a chimney (as well as a source of light) by no means reduces, but rather reinforces the macrocosmic symbolism, for it is both as an ascending flame and as a pillar of smoke by which Agni props up the sky, as in *Ṛgveda*, IV.6.2–3 where 'Agni, even as it were a builder, hath lifted up on high his splendour, even as it were a builder his smoke, yea, holdeth up the sky (*stabhāyat upa dyām*) . . . a standard, as it were the pillar of sacrifice (*svaru = yūpa*), firmly planted and duly chrismed', cf. *Ṛgveda*, III.5.10, IV.5.1, VI. 17–27.

It is certainly not without significance that *vijjhitvā*, 'perforating' or

'penetrating', is also employed in connection with the piercing of a mark or bull's eye by an arrow, e.g. in *Jātaka*, v.129 f., where there is an account of the feats of archery performed by the Bodhisattva Jotipāla ('Keeper of Light'), a superlative marksman (*akkhaṇa-vedhin*)[36] whose shaft is 'tipped with adamant' (*vajiraggam nārācam*),[37] and who is, furthermore, possessed of the power of aerial flight, to be subsequently discussed. One of the feats of the 'Keeper of Light', whom we can only regard as a 'solar hero' and like the Buddha a 'kinsman of the Sun (*ādic cabandhu*), is called 'the threading of the circle' (*cakka-viddham*). In the execution of this feat, his arrow, to which a scarlet thread (*ratta-suttakam*) has been attached, penetrates in succession four marks placed at the four corners of the arena, returning through the first of these marks to his hand, thus describing a circle which proceeds from and ends in himself as its centre. Thus the Bodhisattva, standing within a fourcornered field (*caturassa-paricchedabbhantare*) connects its corners (the four quarters, cf. *Śatapatha Brāhmaṇa*, VI.1.2.29) to himself by means of a thread (*suttakam* = *sūtram*): and this is unmistakably a 'folkore' version of the *sūtrātman* doctrine, according to which the Sun connects these worlds and all things to himself by means of a thread of spiritual light.[38]

We cannot, indeed, agree with M. Foucher that the well-known bow-and-arrow symbol met with on early Indian coins primarily represents a stūpa. On the other hand, as pointed out by Mus, 'Does not the stūpa, considered as constructed wholly round about the axis of the universe, look strangely like a bow to which an arrow has been set?'[39] and, we may add, like other domed structures, if thought of in cross-section. Remembering the actual perforation (*vijjhitvā*) of our roof-plate, and what has been said above about the 'eye of a dome', we cannot but be struck by the fact that in this symbol of a bow and arrow suggesting the cross-section of a stūpa (or any like domed structure) the arrow actually penetrates the apex of the 'dome'; in other words breaks through the summit of contingent being (*bhavāgra*), through the station of the Sun in the zenith into a beyond.

It is at this point that our symbolic archery becomes most significant. For, as will now be seen, that goal which lies beyond the Sun, and which is usually described as reached by a passing through the midst of the Sun, is also very strikingly described in *Muṇḍaka Upaniśada*, II.2.2–4 (which we cite in a slightly condensed form) as to be attained by means of a spiritual marksmanship: 'Resplendent-sun (*arcinam*), imperishable Brahman, Breath of Life (*prāṇaḥ*), Truth (*satyam*), Immortal—That is

the mark (*lakṣyam*) to be penetrated (*veddhavyam*).'[40] 'Taking for bow the mighty weapon of the Upaniṣad, set thereunto an arrow pointed by reverent-service, and bending it by the thought of the nature of That, penetrate (*viddhi*)[41] that mark, by friend. OM is the bow, the Spirit (*ātman*) the arrow, Brahman the mark to be penetrated by one abstracted from sensuous-infatuation: as is the arrow, so should he become of that same nature' (*śaravat tanmayo bhavet*), i.e. of the nature of That, the mark to be attained. It is only as no man to whom soul-and-body are 'himself', no man who still conceives 'himself' to be so-and-so, but as one who recognises in 'himself' (*ātman*) only the immanent Spirit (*śarīrātman, dehin*), and moving in the Spirit (*ātmany etya*) or as our text expresses it, making of himself a purely spiritual arrow, that any man can hit That mark so as to be confused with It, as like in like: just as, in more familiar imagery, when rivers reach the sea, their individuality is undone, and one can only speak of 'sea' (*Praśna Upaniśada*, VI.5).

The flight of our spiritual arrow is a flight and an emergence from a total darkness underground and the chiaroscuro of space under the Sun into realms of spiritual light where no Sun shines, nor Moon, but only the light of the Spirit, which is Its own illumination.[42] Now, as we know from texts too many to be cited here at length, it is through the Sun, and only through the Sun, the Truth (*satyam*), and by the way of the Well at the World's End, that there runs the road leading from this defined Order (*ṛta, kosmos*) to an undefined *Empyrean*. It is 'through the hub of the wheel, the midst of the Sun, the cleft in heaven, that is all covered over by rays, that one is altogether liberated' (*Jai. Upaniśada Brāhmaṇa*, I.3.5–6). The Sun is the world-gate (*lokadvāra*), which admits the Comprehensor into Paradise, but is a barrier (*nirodha*) to the ignorant' (*Chā. Upaniśada*, VIII.6.6, cf. *Jai. Upaniśada Brāhmaṇa*, I.5 and III.14). The question is asked accordingly 'Who is qualified (*arhati*) to pass through the midst of the Sun? (*Jai. Upaniśada Brāhmaṇa*, I.6.1, cf. *Kaṭha Upaniśada*, II.21 *kas tam . . . devam jñātum arhati*).[43] The 'arhati' immediately reminds us of those *arhats* who ascend in the air, pass through the roof-plate (*kaṇṇikāmandalam*) and are 'movers at will . . .'

We proceed to an analysis of the significance of the dome and roof-plate, using as key the various accounts of the miraculous powers of the Buddhist *arhats*, 'spiritual adepts', by which powers (*iddhi*) they are able to rise in the air, and if within a roofed structure to emerge from it by 'breaking through' the roof-plate, and subsequently moving at will in the beyond.

We shall first consider the case in which this power is exercised out

of doors, and where there is therefore no reference to an artificial roof plate; and it will be necessary to consider the nature of the miracle itself which as we have already seen can also be thought of as an interior operation, before we make use of it in explaining the symbolism of the dome itself. In *Milindapañha*, 85, the power (*iddhi*) of travelling through the sky is explained as consisting in an intellectual virtue analogous to that sort of mental resolution by means of which, in ordinary jumping, 'one's body seems to be light' when the moment for taking off arrives. In *Jātaka*, v.125–7 we have the case of the Elder Moggallāna, an *arhat*, who by means of his miraculous power (*iddhi-balena*) is able to visit Heaven or Hell at will. This Elder, being in danger of death at the hands of certain evilly-disposed persons, 'flew up and made off' (*uppatitvā pakkāmi*). Upon a subsequent occasion, because of a former sin of which the trace remained in him, he 'could not fly up in the air' (*ākāse uppatitum nāsakkhi*). Left for dead by his enemies, he nevertheless recovered consciousness, and 'investing his body in the cloak of contemplation' (*jhāna-veṭhanena sarīram veṭhetvā*), he 'flew off into the Buddha's presence' and obtained permission to end his life. At the close of the subsequent 'Story of the Past' related by the Buddha we are told that the assembled Prophets (*isiyo*) also 'flew up into the air and went to their own places'.

We hardly need to go beyond these texts for an adequate indication of the true nature of the 'power' (*iddhi*) of flying through the air. In the first place it may be observed that *uppatitvā*, 'flying' implies wings, as of a bird;[44] and that wings, in all traditions, are the characteristic of angels, as being intellectual substances independent of local motion; an intellectual substance, as such, being immediately present at the point to which its attention is directed. It is in this sense that the 'Intellect is the swiftest of birds' (*manaḥ javiṣṭam patayatsv antaḥ*, *Ṛgveda*, VI.9.5); that the sacrificer endowed by the singing-priest with wings of sound by means of the Syllable (OM) is supported by these wings, and 'sits without fear in the world of heavenly-light and likewise goeth about' (*ācarati*, *Jaiminīya Upaniṣada Brāhmaṇa*, II.14.9–10), i.e. as a 'mover at will' (*kāmācarin*), cf. *Pañcaviṁśa Brāhmaṇa*, XXV.3.4 'for wherever a winged thing would go thereunto it comes'; and that 'of such as ascend to the top of the Tree, those that are winged fly away, the wingless fall down: it is the comprehensors that are winged, the ignorant wingless' (*Pañcaviṁśa Brāhmaṇa*, XIV.1.12–13).[45]

In the second place it will be observed that the power of motion at will presupposes a state of perfection, that of one who can be thought of as *arhat*, or in other terms *kṛtakṛtyaḥ*, *sukṛtaḥ*, *kṛtātmā*: it is inhibited

by even a trace of defect. And finally, the very striking expressions 'flew up into the air' and 'investing his body in the cloak of contemplation' imply at the same time an 'ascension' and a 'disappearance'. The meanings of *veṭhetvā* = *veṣṭitvā* include those of 'wrapping up', 'enveloping', and 'veiling', and hence of 'concealing' that which is enveloped which in the present case is the body (*sarīram*) or appearance (*rūpam*) of the person concerned.[46] The primary senses of *pakkāmi* = *prākramīt* are 'went forth', 'made his exit', or as in our rendering, 'made off', or 'disappeared' as in Cowell and Francis (*Jātaka*, V.65).

What is really involved and implied by an 'investiture of the body in the cloak of contemplation' is a disappearance into one's spiritual-essence, or 'being in the spirit' (*ātmany antarhita, guhā nihita, ātmany etya*);[47] just as in Manu, I.51, where the manifested Deity, having completed his creative operation, is described as having 'vanished into his own spiritual-essence (*ātmany antar dadhe*, being accordingly *ātmany hita, antarhita, guhā nihita, adṛśya*),[48] super-enclosing time within time' (*bhūyaḥ kālaṃ kālena pīḍayan*),[49] that is to say in the language of *Genesis*, II, 2 'rested on the seventh day from all his work which he had made'.

To have entered thus into one's own spiritual-essence—*ātmany antarhito bhūtvā*—is to have realised that state of unification (*samādhi*) which is in fact the consummation of *dhyāna* in Indian, as *excessus* or *raptus* is that of *contemplatio* in Christian *yota*. Nor could we understand the supernatural power of ascension and motion at will otherwise than as a going out of oneself which is more truly an entering into one's very Self. One cannot think of the power as an independent skill or trick, but only as function of the ability to enter into *samādhi* at will and as a manifestation of that perfect recollectedness which are in fact attributed to the *arhat*. To have thus returned to the centre of one's own being is to have reached that centre at which the spiritual axis of the universe intersects the plane on which the empirical consciousness had previously been extended; to have become if not in the fullest sense a *sādhu*, at any [*sic*] *sādhya*, one whose consciousness of being, on whatever plane of being has been concentrated at the 'navel' of that 'earth', and in that pillar (*skambha, stauros*) of which the poles are chthonic Fire and celestial Sun . . .

We are now in a position to consider the texts in which a breaking through the roofplate of a house, and even a breaking down of the house itself is spoken of. In *Jātaka*, III.472 the *arhat* 'flies up in the air, cleaving the roof-plate of the palace' (*ākāse uppatitvā pāsādakaṇṇikam dvidhā katvā*). In *Dhammapada Aṭṭhakathā*, I.63, an *arhat* 'flying up by

his "power", breaks through the roof-plate of the peaked (or probably domed) house, and goes off in the air'. *Ib.* III.66, the *arhat* Moggallana (cf. *Jātaka*, IV.228–9)' 'breaking through the round of the roof-plate springs into the air' (*kaṇṇikā-maṇḍalam bhinditvā ākasan pakkhandi*), is incidentally good evidence also for the circular form of the plate. Finally, *Jātaka*, 1.76, we have the Buddha's song of triumph on the occasion of the Full Awakening (*mahāsambodhi*), in which he glories in the fact that the house of life, the tabernacle of the flesh has once and for all been broken down (*gahakūṭam visaṅkhitam*).[50]

If we have not by any means exhausted the subject of the symbolic values of Indian architecture, we may perhaps claim to have shown that during a period of millennia this architecture must be thought as having been not merely one of 'material facts' but also an iconography: that the form of the house conceived in the artist's mind as the pattern of the work to be done, and in response to the needs of the householder (whether human or divine), actually served the double requirements of a man who can be spoken of as a whole man, to whom it had not yet occurred that it might be possible to live 'by bricks and mortar only', and not also in the light of eternity, 'by every word that proceedeth out of the mouth of God', by which we mean in India precisely 'what was heard' (*śruti* = *veda*), together with the accessory sciences (*śāstra*), of which the basic principle is to imitate what was done by the Gods in the beginning, or in other words to imitate Nature, Natura Naturans, Creatrix, Deus, in her manner of operation.[51] By touching on the subject of other things than buildings made by art, and that of other than Indian architecture, we have implied that the metaphysical tradition, or *philosophia perennis*, of which the specifically Indian form is Vedic, is the heritage and birthright of all mankind, and not merely of this or that chosen people; and hence that it can be said of all humane artistic operation that its ends have always been at the same time physical and spiritual good. This is merely to restate the Aristotelian and scholastic doctrine that the general end of art is the good of man, that the good is that for which a need is felt and to which we are attracted by its beauty (by which we recognise it, as though it said, 'Here am I'), and that the whole or holy man has always been conscious at the same time of physical and spiritual needs; and therefore not in any capacity merely a doer or merely contemplative, but a doer by contemplation and a contemplative in act.

Finally we contend that nothing has been gained, but very much lost, both spiritually and practically, by our modern ignorance of the meanings of superstitions, which are in fact 'stand-overs' that are only meaningless

to us because we have forgotten what they mean. If the thunderstorm is no longer for us the marriage of Heaven and Earth, but only a discharge of electricity, all that we have really done is to substitute a physical for a metaphysical level of reference; the man is far more a man who can realise the perfect validity of both explanations, each on its own level of reference. Of the man who could look up to the roof of his house, or temple, and say 'there hangs the Supernal Sun', or down at his hearth and say 'there is the Navel of the Earth', we maintain not only that his house and temple were the more serviceable to him and the more beautiful in fact, but in every sense much more such homes as the dignity of man demands than are our own 'machines to live in'.

Notes and References

1. E. Schroeder, in an article to appear in the *Survey of Persian Art*, (ed.) Arthur U. Pope, Oxford, 1920. In a consideration of the successive courses of the elevation, Schroeder also remarks that 'the four zones suggest in their succession a series of metaphysical concepts whose progression has been the concern of contemplatives from Pythagoras to St. Thomas: first individuality or multiplicity, secondly conflict and pain, next unanimity, consent and peace, and finally unification, loss of individuality, beatitude'.
2. J.H. Probst-Biraben, 'Symbolisme des arts plastiques de l'Occident et du Proche-Orient,' *Le Voile d'Isis* (now *Études Traditionelles*) vol. 40, 1935, p. 16.
3. Jane E. Harrison, *Themis*, Cambridge, 1912, p. 92.
4. Ṛbhu, from *rabh* (cf. *labh*), as in *ārabh* to 'undertake' 'fashion' and *rambha*, a 'prop', 'post' 'support'. In *Ṛgveda*, x, 125, 8, *ārambhamāṇā bhuvanāni viśvā*, 'fashioning all the worlds, the universe' embodies the meaning also of setting up all the houses.
5. Hence it is that actual temples, as at Koṇāraka, may be provided with wheels and represented as drawn by horses; and it is from the same point of view that their movable images are carried in procession on chariots, drawn by men or horses, of which the most familiar example is that of the annual procession of the 'Lord of the World' (Jagannātha) at Puri. That the universe is thought of as a house not only in a spatial but also in temporal sense is seen in *Śatapatha Brāhmaṇa*, x.66.1.19. 'He alone wins the Year who knows its doors, for what were he to do with a house who cannot find his way inside?'
6. Similarly *Maitri Upaniśada*, VI.6, 'The eye of Prajāpati's crudest form, his cosmic body, is the Sun: for the Person's great dimensioned world (*mātrāḥ*) depends upon the eye, since it is with the eye that he moves about amongst dimensioned things' (*mātrāḥ*) literally 'measured things', and hence the material world of measurable things, or whatever occupies space.

   It may be remarked that although we began with the case of the dome on a square base, the spatial principles involved are the same in the case of a circular

base, since any 'field' is determined in two dimensions. Heaven and earth are generally thought of as wheels or circles (*cakra*); but in the *Śatapatha Brāhmaṇa*, XIV.3.1.17 the Sun is 'four-cornered, for the quarters are his corners' and ibid., VI.1.2.29 the earth is similarly 'four-cornered, and that is why the bricks (of the altar) are likewise four-cornered'.

The Axis of the Universe according to the texts or as represented is usually cylindrical or four or eight-angled; early Indian pillars usually either cylindrical or eight-angled. We might also have discussed the symbolism of these pillars, and similarly that of the palace supported by a single pillar (*ekathambhaka-prāsāda*), but will merely cite as parallel 'Every column in those Achaemenid palaces was an emblem of the sun-god to which the king of kings might look up' (Anna Roes, *Greek Geometric Art*, Oxford, 1933).

7. *Camasam* (= *pātram*) *bhakṣaṇam*, the solar 'Grail' as an all-wish-fulfilling feeding-vessel; regarded either as himself the 'enjoyer' or as the Titan's (Varuṇa's) 'means of enjoyment', just as we speak of the eye as 'seeing' or as the 'means of vision'. The Titan Father's bowl, which is also his 'eye' (*Ṛgveda*, I.50.5–7, X.82. 1, X.88.13, *Atharvaveda*, 7.33. etc.) provides whatever 'food' may be desired, precisely inasmuch as it is the solar orb, paten, or platter which envisages and thus partakes of all things at once; in which sense it is that 'The Sun with his five rays feeds upon the objects of sense-perception' (*viṣayān atti*, *Maitri Upaniśada*, VI.31, cf. *pippalam . . . atti*, *Ṛgveda*, I.164.20), i.e. 'When as the Lord of Immorality he rises up by food' (*amṛtatvasyāsāno yad annena atirohati*, *Ṛgveda*, X.90.2 = 'comes eating and drinking'); which rays are 'the far seeing rays of Varuṇa', *Ṛgveda*, X.41.9, 'five' if we consider the four quarters and central orb 'seven' if we also consider the zenith and nadir, or more indefinitely 'a hundred and one', of which the hundred and first is again the central orb. The bowl is not, as some have suggested, the Moon—'The Person in the orb is the eater, the Moon his food. . . . The Moon is the food of the gods' (Śb. X.5.2.18 and I.6.4.5), 'The Sun is the eater, the Moon his dues. When this pair unites,, it is termed the eater, not the food' (Śb. X.6.2.3 and 4). It is of course as 'world' or 'universe', all that is 'under the sun', that the Moon is his 'meat'. The very 'life of Varuṇa, the Fisher King, the deity *ab intra*, otherwise inert and impotent, depends upon this Grail as the eternal means of his rejuvenation and procession. And this solar Grail is the prototype of every sacrificial paten. For the Grail motif in the Indian traditions, and the Buddha's bowl as a Grail, see my *Yakṣas*, Pt. II, pp. 37–42, 1931 (new edition in preparation).

8. *Mukha*, 'entrance', 'gateway', as in *Jaiminīya Upaniśada Brāhmaṇa*, III.33.8, 'The comprehensor thereof, frequenting in the spirit both these classes of divinities (Gale, Fire, Moon, Sun as transcendent and as immanent), the Gate receives him' (*vidvān . . . etā ubhayīr devatā ātmany etya, mukha ādatte*); *Aitareya Brāhmaṇa*, III.42, 'Agni ascended, reaching the sky, he opened the door of the world of heaven' (*svargasya lokasya dvāram*). For *mukha* as the gateway of a city or fort see Kauṭilya *Arthaśāstra*, II, ch. 21, and the plan in *Eastern Art*, II, 1930, Pl. CXXII, the 'mouth' of the gateway is approached by a bridge of 'concourse' (*saṃkrama*) which spans the moat, so that whoever enters may be said to have reached the 'farther shore'. There is accordingly a solar symbolism of gateways and of bridges and bridge-builders.

9. This holds good also in the analogous case of the four-fold partition of the *vajra* (made by Tvaṣṭṛ, given to Indra,, and with which he smites the Dragon, *Ṛgveda*, I.85.9, etc.), inasmuch as the four parts are to be wielded, or otherwise moved, *Śatapatha Brāhmaṇa*, 1.2.4.

   The coronate and royal Buddha types of the Mahāyāna iconography characteristically hold the begging-bowl, and represent (1) the Buddha as Cakravartin, or King of the World, and (2) the Sambhogakāya or Body of Beatitude (Mus, 'Le Buddha paré,' *Bulletin de l'Ecole Française de l'Extrême Orient, BEFEO*, 1928, pp. 274, 277). Now we suggest that *sam* in *sambhoga* has the value 'completely' or 'absolutely' rather than that of 'in company with'; *sambhoga* is not (in these contexts) eating 'together with others', but an 'all-eating' in a sense analogous to that of 'all-knowing', cf. *sam-bodhi, saṃ-vid, sams-kṛ*, etc. The bowl is more than the simple *patta* in which a wandering monk collects his food from here or there, it is a *puṇṇa patta*, a 'full bowl', furnished with all kinds of food; and the story seems to assert unmistakably that His body who eats from it is no mere *kāya*, but the Sambhogakāya or Body of Omnifruition. Mus, approaching the problem from another angle, has reached the same conclusion, that the term *sambhoga* implies a perfect, universal, and effortless fruition; pointing out at the same time that *anābhoga*, meaning 'not relying upon any external source of nourishment', naturally coincides with *sambhoga* in one and the same subject, and implies a self-subsistence of which the Sun is an evident image (*Barabuḍur*, p. 659). My own interpretation of the atonement of the four bowls merely confirms these deductions.

10. From other points of view, of course, the Sun can be regarded as having one, four, five, eight, nine, or a 'thousand' rays; eight, for example, with respect to the four quarters and four half-quarters on a given plane of being.

11. A fuller discussion of the Vedic 'Cross of Light', of which the arms are the pathways of the Spirit, must be undertaken elsewhere. In the meantime, for the expression *trivṛd vajra*, see *Jaiminīya Brāhmaṇa*, I.247: 'The procession of the threefold spear perpetually coincides with that of these worlds' (*trivṛd vajro'harahar imān lokān anuvartata*); for the 'best ray' (*param bhās, jyeṣṭha raśmi*, cf. *jyotiṣām jyotis*, 'light of lights' see *Śatapatha Brāhmaṇa*, I.9.3.10 with Mahidhara's commentary, together with *Jaiminīya Upaniśada Brāhmaṇa*, I.30.4 *yat param atibhati . . . tam abhyatimucyate*; and for the *sūtrātman* doctrine, *Ṛgveda*, I.115.1, *Atharvaveda*, X.8.37–8, *Śatapatha Brāhmaṇa*, VI.7.1.17 and VIII.7.3.10, where the Sun is said to 'string these worlds to Himself by the thread of the Gale of the Spirit' and to be the 'point of attachment' (*āsañjanam*) to which these worlds are bound by means of the six directions, cf. in *Atharvaveda*, X.7.42 the concept of the universal warp of being as fastened by six pegs or rays of light (*tantram . . . sanmayūkham*); and *Bhagavad Gītā*, VII.7 and X.20. It may be added that similar ideas are clearly expressed in the apocryphal *Acts of John*, 98–9 and *Acts of Peter*, XXXVIII.

    To avoid all possibility of confusion, it must be emphasised that the position

of the Sun in the universe is in the Vedic tradition always at the centre, and not at the top of the universe, although always above and at the 'Top of the Tree', when considered from any point within the universe. How this is will be readily understood if we consider the universe as symbolised by the wheel, of which the centre is the Sun and the felly any ground of being. From any one position on the felly it will be seen that the Axis of the Universe, which pillars apart Heaven and Earth, is a radius of the circle and a ray of the Sun, occupying what is from our point of view the zenith, but from the solar point of view the nadir; while from an exactly opposite position on the felly, the same will hold good. The Axis of the Universe is represented then by what in the diagram is actually a diameter, made up of what is from any one point of view a nadir and a zenith, in other words, the axis passes geometrically through the Sun. It is in quite another than this geometric sense that the 'seventh ray' passes through the Sun, viz. into an undimensioned beyond, which is not contained within the dimensioned circle of the universe. The prolongation of this seventh ray beyond the Sun is accordingly incapable of any geometric representation; from our point of view it ends in the Sun, and is the disc of the Sun, through which we cannot gaze, otherwise than in the spirit, and not by any means either physically or psychically. To this 'ineffable' quality of the prolongation of the 'Way' beyond the Sun correspond the Upaniṣad and Buddhist designations of the continuing *brahmapatha* as 'non-human' (*amānava*) and as 'uncommunicable' or 'untaught' (*aśaikṣa*), and the whole doctrine of 'Silence' (see my 'Vedic doctrine of Silence', *Études Traditionelles*, 42, 1937). The essential distinction of this seventh ray from the other spatial rays (which also corresponds to the distinction of transcendent from immanent and of infinite from finite) is clearly marked in symbolic representations, of which we give two illustrations, respectively Hindu and Christian.

The seven-rayed Sun (a) as represented on Indian punch-marked coins, after Allan, *Early Indian Coins* (London, 1936), and (b) from the Nativity in the church of San Matorano in Sicily. In (b) the long shaft of the seventh ray extends downward from the Sun to the Bambins in the cradle.

12. *Jātaka*, I.58; cf. *Chāndogya Upaniśada*, III.8.10, where for the *sādhya* deities the Sun rites always in the zenith and sets in the nadir—and can therefore, so far as they are concerned, cast only a fixed shadow.
13. Mus, 'Barabuḍur: Esquisse d'une Histoire du Bouddhisme fondée sur la critique archéologique des textes', in course of publication in *BEFEO*, 1932 f. Passages quoted above are from Part V, pp. 125, 207, 208.

    Cf. H. Kern, *Histoire du Bouddhisme dans l'Inde* (Paris, 1903), II., p. 154, 'The true Dhātugarbha of the Ādi-Buddha, in other words the Creator, Brahmā, is the Brahmāṇḍa, the world-egg, container of all the elements (*dhātu*) and which is divided into two halves by the horizon. This is the real Dhātugarbha (receptacle of the elements): the constructions are only an imitation of it.'
14. See the excellent discussion of the cosmic chariot and its micro-cosmic replicas, and the demonstration of the analogy of cosmic and human *processions* in Mus, loc. cit., p. 229.

15. Cf. VIII.26.18, 'He (Sun) hath measured out with history the boundaries of Heaven and Earth.'
16. With its interior cell, the 'lotus of the heart, indwelt by the Golden Person of the Sun' (*Maitri Upaniśada*, VI.2), 'ever seated in the heart of creatures' (*Kaṭha Upaniśada*, VI.17), the 'all-containing city of Brahman' (*Chāndogya Upaniśada*, VI.17), the 'all-containing city of Brahman' (*Chāndogya Upaniśada*, VI.17), the 'constance of Indra and Indrāṇī' Heaven and Earth (*Bṛhadāraṇyaka Upaniśada*, VIII.1.6), 'constance of Indra and Indrāṇī' Heaven and Earth (*Bṛhadāraṇyaka Upaniśada*, IV.2.3, *Maitri Upaniśada*, VII.11). We shall see later that it is from the apex of this house of the body or heart that the indwelling Spirit emerges when its connection (*samyoga*) with the individual-body-and-soul is served.

    For a corresponding analogy of the inward and outward 'cells', see William of Thierry, *Epistle to the Brethren of Mont Dieu*, ch. 28 'Thou hast one cell without, another within. The outward cell is the house wherein thy soul and thy body dwell together; the inward is thy conscience (*conscientia*, 'consciousness', 'inward controller', *antaryāmin*), which ought to be dwelt in by God (who is more inward than all thy inward parts) and by the spirit' (sc. *antarātman*): cited from Shewring's Version, London, 1930, p. 51.
17. Our allusion is in fact to the metaphysical identification of woman with the household fire (*gārhapatya*) and of the act of insemination with that of a ritual offering in this fire; for which see *Jaiminīya Brāhmaṇa*, I.17 (*JAOS*, XIX.115–16) and (*Bṛhadāraṇyaka Upaniśada*, VI.4.1–3). Considered from this point of view all birth is from fire. Man's first birth is his liberation from an antenatal hell; he enters at birth into a purgatorial space; and being laid in the sacrificial fire at death, is regenerated through the Sun; his earthly motions are horizontal, his spiritual ascent vertical, by way of the stauros, under whatever aspect this pillar may be represented.
18. Just as in connection with painting we find the instruction *tad dhyātam bhittau niveśayet*, 'Put down on the wall what has been imagined' (*Abhilaṣitārthacintāmaṇi*, I.3.158).
19. 'The intellectual operation in Indian art', *Journal of the Indian Society of Oriental Art*, III, pp. 1–12, 1935; 'The Technique and Theory of Indian Painting', *Technical Studies*, III, pp. 59–89, 1934. *The Transformation of Nature in Art*, Cambridge, 1935.
20. *Dhī* as noun is not so much merely 'thought', but specifically *contemplatio, theoria, ars, prognosis*; and *dhīra* not merely 'wise' but specifically 'contemplative' and tantamount to *yogī*, especially in the sense in which the latter term is sometimes applied to artists.
21. Needless to say that the doctrines of the 'freedom of the artist' and of artistic 'self-expression' could only have arisen, in logical apposition to that of the 'free examination' of the Scriptures, in such an anti-traditional environment as that which had been provided by the Protestant Reformation [*sic*], with its altogether unchristian evaluation of 'personality'.
22. Mus, loc. cit., pp. 121, 360.
23. We say 'universal' advisedly, and not merely with reference to each and every human construction. The universe itself can be understood only with reference

to its axis. The creation is continually described as a 'pillaring-apart' (*viskambhana*) of Heaven and Earth; and that 'Pillar' (*skambha* = *stauros*) by which this is done is itself the exemplar of the universe. 'It is pillared-apart by this Pillar that Heaven and Earth stand fast; the Pillar is all this enspirited (*ātmanvat*) world, whatever breathes or winks' (*Atharvaveda*, x.8.2); 'Therein the future and the past and all the worlds are stayed' (*Atharvaveda*, x.7.22); 'Therein inheres all this' (*Atharvaveda*, x.8.6); 'Trunk of the Tree wherein abide whatever Gods there be' (*Atharvaveda*, x.6, 38).

Two illustrations may be cited. The Deopārā inscriptions of Vijayasena say that this king erected (*vyadhita*, lit. 'struck', in the sense in which one 'sticks up' a post) a temple of Pradyumna, which was the 'Mount (Meru) whereupon the Sun at midday rests the Tree whose branches are the quarters of space, (*dik-śākhā-mūla-kāṇḍam*), and only sustaining pillar of the house of the Three Worlds' (*ālamba-stambham ekaṃ tribhuvana-bhavanasya*) (*Epigraphia Indica*, I.310, 314, cited by Mus, pt. IV, p. 144, *BEFEO*).

In the *Volsunga Saga*, 'King Volsung let build a noble hall in such, a wise that a big oak-tree stood therein, and that the limbs of the tree blossomed fair out over the roof of the hall, while below stood the trunk within it, and the said trunk did men call Branstock' (i.e. Burning Bush); it is moreover from this trunk that Sigmund draws the sword Gram, with which Sigurd subsequently slays Fafnir, cf. the Indian myth of the origin of the sacrificial sword, quoted in another note.

It will be observed that in Volsung's hall the roof is penetrated by the stem of the World-Tree. The hall is virtually a hypæthral temple, like the Indian *bodhighara*, fully described in *Eastern Art*, II, 1930, pp. 225–35.

24. These penetrations of the roof and floor correspond to what in the case of the cosmic chariot are the insertions of the axle-tree in the hubs of the wheels. The Serpent underground, an Endless Resinum (*ananta śeṣa*), is the non-proceeding Godhead, Death, overcome by the proceeding Energy with whom the Axis of the Universe, its exemplary support, is identified, and Who 'occupies' the whole universe in the same way that the stauros, as the first principle of space, is said to 'occupy' the six extents, for example in *Atharvaveda*, x.7.35, 'The Pillar (*skambha*) hath given their place to both Heaven and Earth and to the Space-between them, hath given a place to the six extents (i.e. the three dimensions of space considered as proceeding from a common centre in opposite directions), and taken up its residence (*i viveśa*) in this whole universe', for all of which we have in practice the direct analogy of the builder's gnomon, set up in the beginning, and employed as the first principle of the whole lay-out (*Mānasāra*, ch. VI).

25. Sinclair Stevenson, *The Rites of the Twice-Born*, Oxford, 1920, p. 354. Cf. extracts from the *Māyāmataya*, verses 56–60, in my *Mediaeval Sinhalese Art*, London, 1908, p. 207. Stevenson remarks that a fire altar is subsequently made 'in the very centre of the principal room of the house' (*ib.* p. 358). Such a 'principal room' may be said to represent what was once the whole house, in its prototypal form of a circular hut, with its central hearth. At least in the case

of this prototype, it will be safe to assume that this central hearth has been constructed immediately above the transfixed head of the chthonic Serpent; and it will be remarked that the smoke of the fire will rise vertically upwards to the eye or luffer in the roof, from which it escapes. These relations correspond exactly with the doctrine that the household fire is *ab extra* and manifestly what the chthonic Serpent is *ab intra* and invisibly (*Aitareya Brāhmaṇa*, III.36) and with such texts as *Ṛgveda*, III.55.7 where Agni is said to remain within his ground, even while he goes forth (*anv agraṃ carati kṣeti budhnaḥ*)—proceeds, that is, when he has been 'awakened' by Indra's lance (*sasantaṃ vajreṇa abodhyo'him*, *Ṛgveda*, I.103.7, which 'awakening' is a 'kindling', as in *Ṛgveda*, V.14.1 'Awaken Agni, ye that kindle him', *agnim . . . abodhya samidhanaḥ*)—and with the identification of Agni with the 'Head of Being' *Ṛgveda*, X.88.6 and *Aitareya Brāhmaṇa*, III.43, see my 'Angel and Titan', *JAOS*, 55, p. 413. Furthermore, were it not that the smoke passes through the roof and into the beyond, the analogy would be defective, since in this case (i.e. if the smoke of the burnt offering were confined) Agni could not be thought of as the missal priest by whom the oblation is conveyed to the immortal deities whose abiding place is beyond the solar portal.

26. Mus, *BEFEO*, 1932, p. 207.

It will not be overlooked that even in modern Western practice there still survives the laying of a foundation stone, accompanied by what are strictly speaking metaphysical rites; nor that such survivals are strictly speaking superstitions, or 'stand-overs' of observances of which the meaning is no longer understood.

27. In connection with this 'bloody point' and the cosmic instability that follows upon its withdrawal there could be developed an exposition of the phallic and fertilising properties of the Axis of the Universe, of which the Bleeding Lance of the Grail tradition, the Indian Śiva-liṅgam and the planting-stick or ploughshare are other aspects. But this would be to wander too far away from the present architectural theme.

28. W. Waterfield and G. Grierson, *The Lay of Alha*, Oxford, 1923, pp. 276 f. The Brahman's question in the ballad, 'How should mortal dare deal the Nāga king a mortal blow?' exactly corresponds to that of Mus, loc. cit., 'How is that each house could be made out to stand just above the head of the mythical Serpent, the supporter of the world.' The answer is, of course, that the very centre of the world, the 'navel of the earth' (*nābhiḥ pṛthivyāḥ*), beneath which lies the all supporting serpent *Śeṣa*, Ananta (Ahir Budhnya, Ahi-Vṛtra) is not a topographically situated place, but a place in principle, of which every established and duly consecrated 'centre' can be regarded as an hypostasis. In this sense, and just as the *forma humanitatis* is present in every man, the form of the unique Serpent is an actual presence wherever a 'centre' has been ritually determined. In the same way the transfixing peg is the nether point of Indra's *vajra*, wherewith the Serpent was transfixed in the beginning. It is an illustration of the customary precision of Blake's iconography that in his Prophecy of the Crucifixion, the nail that pierces the Saviour's feet pierces also the head of the Serpent.

For the general principle involved in the consecration of a holystead, see *Śatapatha Brāhmaṇa*, III.1.1.4: 'Verily this whole earth is the goddess (Earth); on whatsoever part thereof one may propose to offer sacrifice, when that part has been taken hold of by means of a sacred formula (*yajuṣā parigrahya*), there let him perform the sacrificial rite' the rite, of course, involving the erection of an altar 'at the centre of the earth'.

29. 'He spread her out (cf. Skr. *pṛthivī*), and when He saw that she had come to rest on the waters, He fastened upon her the mountain' (Ibn Hishām, quoted by Lyall, *JRAS*, 1930 p. 783).
30. Mus, loc. cit., p. 361.
31. Andrae, W., *Die Ionische Saüle*, Berlin, 1933, Schlüsswort. 'He for whom this concept of the origin or ornament seems strange, should study for once the representations of the whole third and fourth millennia BC in Egypt and Mesopotamia, contrasting them with such "ornaments" as are properly so called in our modern sense. It will be found that scarcely even a single example can be found there. Whatever may seem to be such, is a drastically indispensable technical form, or it is an expressive form, the picture of a spiritual truth': for 'or' in the last sentence we could wish to substitute 'and at the same time'.

Similarly Herbert Spinden, in the *Brooklyn Museum Quarterly*, 1935, pp. 168 and 171: 'Then came the Renaissance . . . Man ceased to be a part of the universe, and came down to earth. So it would seem that there are only two categories of art, one a primitive or spiritual category, one a category of disillusioned realism based on material experiments . . . (The primitive artists) wrought and fought for ideas which hardly come within the scope of immediate comprehension. Our first reaction is one of wonder, but our second should be an effort to understand. Nor should we accept a pleasurable effect upon our unintelligent nerve ends as an index of understanding.'

32. *Ṛgveda*, passim; A. III.22.5; *Bṛhadāran Upaniśada*, I.3.8.14; III.1.4; *Kaṭha Upaniśada*, V.11; *Sam. Nikāya*, I.138; *Atthasālinī*, 38; *S. Nipāta*, I.599; etc. *Oculus mundi* is the sun in Ovid, *Metamorphoses*, 4.228, whence 'eye of the world' = 'sun' in English. Other meanings of English 'eye' include 'centre of revolution', 'socket' (for insertion of another object), 'place of exit or ingress', 'fountain' (well-eye), brightest spot or centre'. Arabic '*ain* and Persian *chashm*, *chashma* are 'eye', 'sun', and 'well-spring'. '*ain* also 'exemplar'. None of these meanings is without significance in the present connection.
33. The two eyes of the double volute correspond in fact to the Sun and the Moon, which are the eyes of the sky, *Ṛgveda*, I.70.10. It is not inconceivable that in apsidal buildings having an apse and therefore also a roof-plate at each end, the two *kaṇṇikās* were thought of as respectively the Sun and Moon of the house.
34. Harrison, *Themis*, pp. 91–2. Harrison adds, 'But what does, Poseidon want with a hole in the roof?' and answers correctly enough that 'before Poseidon took to the sea he was Erectheus the Smiter, the Earth-shaker'. Poseidon is no more than Ouranos or Varuṇa in an essentially limited sense a sea-god. These are, like the God of *Genesis*, the God of the primordial Waters (both the upper and the nether) representative of 'all possibility'; if he bears a trident, iconographically

indistinguishable from Śiva's *triśūla* and Indra's *vajra*, and which is in fact a solar shaft, it is because he is not merely a 'seagod' in the later and literary sense, but the protean deity of all that is, whether above or below. Vitruvius (1. 2. 5) says that Fulgur, Coelum, Sol and Luna were worshipped in hypaethral temples. Even the domes of such modern structures as St. Paul's may be called, with respect to their 'eyes', vestigially hypaethral shrines of the Sky-god. In cathedrals, of which the vault is generally closed, the opening is replaced by a representation of an evidently solar type; as Byron and Rice express it, 'The central dome was *reft* by the stupendous frown of Christ pantocrator, the sovereign judge' (Robert Byron and David T. Rice, *Birth of Western Painting*, London, 1930, p. 81, italics mine).

35. 'It was the abode of a blacksmith . . . we were ushered into the hall of dais, into the sanctum of the edifice. The "riggin" was above our heads . . . Chimney, of course, there was none, an opening in the centre of the roof immediately above the fire, allowed the egress of the smoke and admitted light enough to see one's way in the apartment . . . Around the fire were arranged soft seats of turf for the family' (E. Charlton, 'Journal of an Expedition to Shetland in 1834', in *Sagabook of the Viking Society*, London, 1936, p. 62). This description of the main room of a house, still surviving in the nineteenth century, is applicable in every detail to what we understand to have been the typical form of a dwelling already in the Stone Age, and generally as the prototype of the house, itself mimetic of a macrocosmic archetype.
36. The etymology of the word *akkhaṇa* has been disputed: as PTS. remarks 'We should expect either an etym. bearing on the meaning "hitting the centre of the target" (i.e. its "eye") (cp. E. bull's eye) . . . or an etym. like "hitting without mishap".' It is evident in fact that the connection of *akkhaṇa* is with Skr. *akṣ*, to 'reach' or 'penetrate', the source of *akṣa* and *akṣam*, 'eye' and *ākhaṇa*, 'butt' or 'target' and in fact 'bull's eye'. We digress to cite the latter word from *Jaiminīya Upaniśada Brāhmaṇa*, I.60.8 'The breath of life is this stone as a target' (*sa eṣo'śmākhaṇam yat prāṇaḥ*, where it may be noted that *prāṇa* and *aśman* can both be taken as references to the Sun, cf. *Ṛgveda*, VII.104.19 *divo aśmānam*) which target the Asuras cannot affect.

Akṣa is also 'axis' and 'axle-tree' (distinguished only by accent from *akṣa*, 'eye'), and Benfey was evidently near the mark when he suggested that *akṣa* as axle-tree was so called as forming the 'eye' in the hub of the wheel which it penetrates. E. *eye* G. *auge*) and E. *axis* and *auger* present some curious analogies with Skr. *akṣa* and *akṣi*. Auger is stated to represent O.E. *nafu-gār*, 'that which perforates the nave of a wheel'; had it been related to G. *auge*; would be 'that which makes an "eye" in anything'. It may be added that Skr. *akṣāgra* is the 'axle point', and the hub its 'door', *akṣa-dvāra*.

Akkhaṇa-vedhin is then 'one who pierces the "eye",' or 'one whose arrow penetrates the bull's eye': in the present context it would scarcely be too much to say 'Pierces the centre of the disc of the Sun' or 'hits the solar and macrocosmic Bull's eye', cf. *Muṇḍaka Upaniśada* cited below. Probably the best short English equivalent for *akkhaṇa-vedhin* would be 'infallible marksman'.

We find the epithet again in *Jātaka* no. 181 (*Jātaka*, II.88 f.) where it is applied to the Bodhisattva Asadisa ('Nonpareil'), who performs two feats. In the first, a king under whom the Bodhisattva has taken service, is seated at the foot of a mango-tree (*ambarukkhamule*) on a great couch close beside a 'ceremonial stone slab' (*mangalasilā-paṭṭa*, probably an altar of Kāmadeva, cf. *Daśakumāra-carita*, ch. v, as cited in my *Yakṣas*, II, p. 12); the king desires his archers to bring down a bunch of mangoes from the top of the tree (*rukkhagge* = *vṛkṣāgre*) Nonpareil undertakes to do so, but must first stand just where the king is sitting, which he is allowed to do (we see here a close analogy to the Māra-dharṣaṇa scene, and to that of the First Meditation, with the implication that the king has been seated precisely at the navel of the earth, or at least a 'centre' analogically identified with that centre); standing then at the foot of the tree, he shoots an arrow upwards, which pierces the mango stalk but does not sever it; and following this a second arrow, which touches and overturns the first, and continues into the heaven of the Thirty Three, where it is retained; finally the original arrow in its fall severs the mango-stalk, and Nonpareil catches the bunch of mangoes in one hand and the arrow in the other. In the second feat, the Bodhisattva's brother Brahmadatta ('Theodore'), king of Benares, is beleaguered by seven other kings. Nonpareil terrifies these and raises the siege by letting fly an arrow which strikes the 'knop of the golden dish from which the seven kings are eating' (*sattannaṃ rājūnam bhuñjantānaṃ kañcanapāti-makule*, where *pāti* = *pātra*), i.e., the centre of this dish, which can hardly be regarded otherwise than as a likeness of the Sun which we have identified with the 'Titan's feeding bowl', *camasan asurasya bhakṣaṇam . . . pātram* in *Ṛgveda*, I.110.3 and 5 cited above.

37. *Vajiraggam*, applied to the weapon of a solar hero, is significant. For the arrow, in origin, is said to have been the broken tip of the primordial *vajra* with which Indra smote the Dragon; which part 'having flown (*pattivā*), is called an arrow (*śara*) because it was broken off' (*aśiryata, Śatapatha Brāhmaṇa*, I.2.4.1). For further data on *vajira, vajra*, see my *Elements of Buddhist Iconography* (rpt. New Delhi, 1972), pp. 43–6. We might say that *vajiraggam* = *vajrāgram* implies as much 'which was the point of the *vajra*' as 'tipped with adamant.'
38. As pointed out in a subsequent note on the 'turn-cap' motif, the question of 'truth' in folklore, fairy-tale, and myth, is not a simple matter of correlation with observed fact, but one of intelligibility. The 'threading of a circle' as described above can only be called a 'miracle' (and for present purposes we assume that 'miraculous' and 'impossible' are much the same): nevertheless we have seen that the narrative has a true meaning. It is no more necessary that a truth should be expressed in terms of fact, than that an equation should resemble its locus. The symbolism must be consistent; it does not have to be historically factual.

Scripture is written in a hieratic language and a parabolic style, often requiring a learned commentary. The oral literature of the folk, which may be called the Bible of the unlearned, is by no means of popular origin, but designed to secure the transmission of the same doctrines by and amongst an unlearned folk. For such a purpose the ideas had necessarily to be imagined and expressed

in readily imitable forms. The same, of course, applies to the visual art of the people, often misconceived of as an essentially 'decorative' art, but which is really an essentially metaphysical and only accidentally decorative art. The necessity and final cause of folk art is not that it should be fully understood by every transmitter, but that it should remain intelligible, and it is precisely for this reason that its actual forms must have been such as would lend themselves to faithful and conservative transmission.

'Conservative transmission' can easily be misunderstood from our modern point of view, in which the emphasis on individuality has led to a confusion of *originality* with *novelty*. Spinden proposes a false alternative when he asks 'Does man, at large, think or merely remember?' (H. Spinden, *Culture, the Diffusion Controversy*, London, 1928, p. 43) 'Transmission' may be either from one generation to another, *or* from one to another contemporary culture. We cannot draw a logical distinction between 'transmission' and 'memory': for even if we set ourselves to copy an object before us, it is only memory, visual or verbal, that enables us to bridge the temporal gap that separates the model from its repetition. If there can be no property in ideas, it is also true that nothing can be known or stated except in some way: and it is precisely in this 'way' that the liberty of the individual subsists; apart from which there could no such thing as a sequence of styles in a given cycle, nor any such thing as a distinction of styles in a national or geographical sense. It is of the essence of 'tradition' that something is *kept alive*; and as long as this is the case, it is as erroneous to speak of a 'mechanical' transmission from generation to generation as it is to suppose that the elements of culture can be mechanically borrowed from one people by another. It is only because our academic science acquaints us for the most part only with dead or dying traditions (often indeed traditions that have been deliberately killed by the representatives of a supposedly higher culture), and because of our own individualistic insistence upon *novelty* that we are so little conscious of the absolute *originality* of even the most conservative peasant art. No one who has ever lived and worked with the traditional artist, whether craftsman or story-teller, has ever failed to recognise that in repeating what has been repeated for countless generations, the man is always completely himself, and giving out what proceeds from within, moved by its form, which giving out from within is precisely what we mean by the word originality. As Mr, Benson himself a 'traditional artist', has recently admirably expressed it, 'If a work of art *originates* in a clear mental image, we call it an *original* work of art. It has a true mental *origin*. Original work has nothing to do with the novelty or newness of the subject or its treatment. The subject and the technique may be as old as the hills, but if they are created in an original mental image, the work will be original' (Museum of Fine Arts, Boston, Third Radio Series, sixth address, February 11, 1936, obtainable from the Museum).

There is something just a little too precious and condescending in the attitude of the modern intellectual who for his part is naive enough to believe that even the more technical language of scripture has none but literal and naturalistic meanings and at the same time proposes to protect the child at its mother's knee

and the peasant by the fire-side from the possibility of a like belief in the literal significance of a transmitted legend, which indeed he may not have fully understood but which at least has been handed down to him reverently and will be handed on by him in the same spirit. We need hardly say that the amoral character of the fairy-tale, to which exception is similarly taken, is only a further evidence of its strictly metaphysical and purely intellectual content.

The *Jātakas*, of course, have been adapted to edifying uses; but it is impossible that the original shapers of the stories should not have understood their analogic significance, and improbable that none of those who heard or read them 'had ears to hear'.

A 'symbolische Schiessen nach den vier Himmelsrichtungen' occurs in late Egyptian art, see H. Schäfer, *Aegyptische und heutige Kunst*, Berlin, 1928, p. 46, Abb. 54. No 'thread' is represented, but it can scarcely be doubted that the arrows are shafts of light. There occur also in late Egyptian art admirable representations of the Sun-door both open and closed, see Schäfer, ibid., p. 101. Abb. 22–4.

39. Mus, loc. cit., p. 118.
40. Cf. *Bhagavad Gītā*, XI.54: 'I can verily be penetrated' (*śakyo hy aham viddhaḥ*). If That (Spirit, *ātman*, immanent as 'body-dweller' and transcendent in itself discarnate) is also described as 'ever impenetrable' (*nityam avedhyaḥ*, ibid., II.30), this means of course, by whatever is not of Its own nature; the Asuras for example being themselves shattered on that Stone that is the Breath of Life, *Jaiminīya Upaniśada Brāhmaṇa*, I.60.8 as quoted in a previous note.
41. With the injunction *tal lakṣyam viddhi*, 'Hit that mark', cf. the expressions *lakṣa-vedhin, lakṣya-vedha, lakṣya-bheda*, and the previously cited *akkhaṇa-vedhin*, all denoting one who hits the mark, the target, the 'bull's eye'. *Viddhi* is the imperative both of *vyadh* to 'pierce' and of *vid* to 'know' the 'penetration' is here in fact a gnosis; in *Jaiminīya Upaniśada Brāhmaṇa*, 18.6 *tad eva brahma tvam viddhi*, '*viddhi*' is perhaps primarily 'know' and secondarily *penetrate*. *Nirvedhya*, from *vyadh*, may be noted in the *Divyāvadāna* as 'intuition' or 'intellectual penetration'. We think, that in the same way Vedic *vedhas* is 'penetrating' in this sense, and to be derived from *vyadh* rather than from *vid*; and hence primarily equivalent to *vedhin*, 'marksman' in the sense of *Upaniśada*, and secondarily 'wise' or 'gnostic'. Consider for example *Ṛgveda*, X.177.7 (*Jaiminīya Upaniśada Brāhmaṇa*, III.35.1) *Pataṅgam . . . hṛdā paśyanti manasā vipaścitaḥ, marīcīnām padam icchantī vedhasaḥ*. An interpretation in terms of archery is, if not indeed inevitable, at least quite possible. For *vipaścitaḥ* is not simply 'wise', but rather 'vibrant' (cf. 'Shaker' = Quaker), and *vip* may mean an arrow, as in *Ṛgveda*, X.99.6 'He smote the boar with bronze-tipped shaft' (*vipā varāham ayas-agrayā han*—incidentally *ayasagra* does not invalidate the mythical origin of the arrow previously cited, inasmuch as the one foot of the Sun, which is also the Axis of the Universe and lance wherewith the Dragon was smitten is itself 'a golden shaft at dawn and one of bronze (*ayas*) at dusk', *Ṛgveda*, V.62, 8). *Icchantī* is from to 'desire' or 'seek' or 'have as one's aim' (Grassmann, 'Die ursprüngliche Bedeutung ist sich nach etwas in Bewegung setzen'), a root distinguished in conjugation but originally identical (Grassmann, 'ursprünglich gleich') with *is* to 'propel' (Grassmann, 'in schnelle Bewegung setzen'), whence *iṣu*, 'arrow'. We translate accordingly, that is, with specific reference to the imagery of *Muṇḍ. Upaniśada*, II.2, as follows: 'Intellectually, within their heart, the vibrant (prophets) descry the winged (Sun = Spirit)—marksmen (*vedhasaḥ*) whose aim pursues the pathway of his rays.'

When in the *Mahābhārata* 'They cause a skin to be pierced (*vyādhayanti*) by a man of the princely caste', by the best available archer (*Aitareya Āraṇyaka*, V.1.5, cf. Keith, *Śaṅkhāyana Āraṇyaka*, pp. 80 ff.), which skin is the Sun himself in a likeness (*Kaṭhaka Saṃhitā*, XXXIV.5), this is evidently a symbolic penetration of the sense of the *Muṇḍaka* text, of which the very words *tad veddhavyaṃ somya viddhi . . . lakṣyam tad evakṣaraṃ somya viddhi* might suitably have been addressed to the archer in the ritual, as he stood before his solar target. According to Keith (*Aitareya Āraṇyaka*, p. 277, note 13 and loc. cit.), 'The idea is clearly a rainspell.' Something of this kind may indeed have been involved, not in the penetration of the Sun, but in the ritual 'intercourse of creatures' (*bhūtanāṃ ca maithunam*) the fall of rain being a consequence of the marriage of Heaven and Earth (*Pañcaviṁśa Brāhmaṇa*, VII.10.1–4, VIII.2.10, and more especially *Jaiminīya Brāhmaṇa*, I.145, 'Yonder world thence gave rain to this world as a marriage gift'). But the modern scholar is far too ready to resort to naturalistic and rationalistic explanations even when as in the present case the most obvious metaphysical interpretations are available. The whole context has to do with the attainment of Heaven; and even the 'intercourse of creatures' is not primarily a 'magical' (fertility) rite, but an imitation of the conjunction of the Sun and Moon 'at the end of the sky, at the Top of the Tree, where Heaven and Earth embrace' (*dyāvāpṛthivī saṃśliṣyathaḥ*) and whence 'one is altogether liberated through the midst of the Sun' (*Jaiminīya Upaniśada Brāhmaṇa*, I.3.2 and I.5.5, cf. my 'Note on the Aśvamedha', *Archiv Orientalni*, VIII, p. 315).

When we assert the priority of the metaphysical significance of a rite, we are not denying that there may have been then as now *avidvānsaḥ* for whom the given rite had a merely magical character: we are deducing from the form of the rite itself that it could only have been thus correctly ordered by those who fully understood its ultimate significance, and that this metaphysical significance must have been understood in the same way by the *evaṃvit*; just as a mathematical equation presupposes a mathematician, and also other mathematicians able to riddle it. That the modern scholar trained in a school of naturalistic interpretation is not a 'mathematician' in this sense proves nothing; 'For the Scriptures crave to be read in that spirit wherein they were made; and in the same spirit they are to be understood' (William of Thierry, *Golden Epistle*, X.31).

42. None of this runs counter to the indefeasible principle that 'the first beginning is the same as the last end'. If the 'long ascent' (*Aitareya Brāhmaṇa*, IV.20–1) is apparently a departure from the chthonic Serpent, a release from the bonds of Varuṇa, it is also a return to Varuṇa, to the Brahman, who is no less above than He is below the Serpent in His ground: which 'ground' is that of nature below, and of essence above, which nature and which essence are the same *in*

divinis, and omnipresent; Ananta girdles these worlds. For the Ophidian nature of the Godhead, see my 'Angel and Titan' and 'Darker side of Dawn', to which may be added the explicit formulation of *Muṇḍaka Upaniśada*, I.2.6 where the Brahman is described as a 'blind (—worm) and deaf (—adder), without hands or feet' (*acakṣuḥśrotraṃ tad apāny apādam*), as is Vṛtra in *Ṛgveda*, I.32.7, Kunāru-Vṛtra in III. (*budhne rajasaḥ*) in IV.1.11, and Ahi in *Śatapatha Brāhmaṇa*, I.6.3. 9; cf. *Atharvaveda*, X.8.21 *apād agre samabhavat*, etc; with this 'Footless he first came into being', compare Shams-i-Tabriz, *Diwān*, XXV in Nicholson's edition, 'The last step to fare without feet'. Ahi is understood to mean 'Residue' (*Jaiminīya Brāhmaṇa*, III.77), and this is, of course, the evident meaning of '*Śeṣa*', as being 'that which is left', *śiṣyate*. It is from this Endless Residuum (*ananta śeṣa*) that one escapes *at* birth, and as and into the same Endless Residuum that one escapes *from* birth. There is no need to cite texts to show in what way the Brahman-Ātman is Endless (*ananta*), but we shall quote two in which the Brahman-Ātman is defined as the Residuum from which one departs at birth, and as the Residuum as and into which one re-enters at last: *Bṛhadāraṇyaka Upaniśada*, V.1, where the ancient Brahman is called a 'plenum that is left behind (*avaśiṣyate*) as a plenum, no matter what has been deducted from it', and *Chāndogya Upaniśada*, VIII.1.4–5 where when the soul-and-body vehicle perishes, 'what is left over (*atiśiṣyata*) thereform . . . is the Spirit' (*ātman*).

Let us remark at this point that the well-known symbol of the Serpent biting its own tail is evidently a representation of the Godhead, the Father, and of Eternity: as a Jeremias has expressed it, 'Des grossartige Symbol der Schlange, die sich in den eigenen Schwanz beisst, stellt den Aëon dar' (A. Jeremias, *Der Antichrist in Geschichte und Gegenwart*, Leipzig, 1930, p. 4).

We speak advisedly of a re-entry 'as and into' the Ophidian Godhead: the 'return to God' can only be in likeness of nature. It can be only as a snake that one can be united to the 'Snake without End', as a circle superimposed on a circle coincides with it. This does not, however, mean that the way from snakehood to snakehood which passes through the Sun, is meaningless for the snake that proceeds (*atisarpati*); on the contrary, it is by means of the sacrifice, the incantation, and by reduction of potentiality to act, that the livid scaly snake-skin must be cast, and a sunny skin revealed; it is as a streak of serpentine lightning that the Wayfarer returns to the source from which he came forth, for which source and now goal no other symbol than that of lightning is adequate, 'The Person seen in the Lightning—I am He, I indeed am He' (*Chāndogya Upaniśada*, IV.13.1, cf. *Kena Upaniśada*, 29–30). It will not be overlooked that in Indian iconography, lightnings are commonly represented in the form of golden snakes.

The foregoing is based on the references cited and on materials collected for a discussion of the symbolism of lightning. In addition there can be cited some Buddhist texts in which the *arhat* is called a 'serpent' in a laudatory sense. In *Majjhima Nikāya*, I.32, for example, the *arhat*s Moggallāna and Sāriputra are Mahānāgā. a 'pair of Great Snakes.' This is explained, *ib.* I.144–5, where an

anthill is excavated (anthills are in fact often the homes of snakes, in *Ṛgveda* are evidently symbols of the primordial mount or cave from which the Hidden Light is released), and when there is found a snake at the very base of the mound (which is called a 'signification of the corruptible flesh') there is found a Nāga, it is explained that this Serpent is a 'signification of the Mendicant in whom the foul-issues have been eradicated', i.e. of an *arhat*, cf. *Sutta Nipāta*, 512, where '*Nāga*' is defined as 'one who does not cling to anything and is released' (*sabattha na sajjati vimutto*). From the first of these two passages it is evident, of course, that the 'Nāga' in question is a snake and not an elephant. To these instances may be added the case of the death of Balarāma related in the Mausala Parvan of the *Mahābhārata*, where Balarāma, being seated alone and lost in contemplation, leaves his body in the shape of a mighty Snake, a white Nāga, having a thousand hoods and of mountainous size, and in this form makes his way into the Sea.

The formulations outlined above may be said to offer an intelligible explanation not merely of many aspects of Indian iconography, but also certain aspects of that of Greek mythology, where Zeus is not only represented as a solar Bull, etc., but also in his chthonic aspect of Zeus Meilichios as a bearded Serpent, and where also the Hero, entombed and deified, is constantly depicted in the same manner.

43. It is, of course, the Pathfinder, Agni, *arhat* in *Ṛgveda*, I.127.6, II.3.1 and X.10, 2, who first 'ascended, reaching the sky; opened the door of the world of heavenly-light (*svargasya lokasya dvāram apāvṛṇot*); and is the ruler of the heavenly realm' (*Aitareya Brāhmaṇa*, III.42); it is 'by qualification' (*arhaṇā*) that the Suns partake of immortality (*Ṛgveda*, X.63.4). In the same way the Buddha (who is none other than *the* Man Agni) opened the doors of immortality for such as have ears (*apārutā tesam amatassa dvārā ye sotavanto, Mv.*, I.7), and as Mus express it, 'Having passed on for ever, the way remains open behind Him' (loc. cit., p. 277).

The Christian parallel is evident, since Christ also prepared the way, ascended into heaven, and sits at the right hand of God. The opening of the gate is discussed by St. Thomas, *Summa Theologia*, III.49.5 'The shutting of the gate is the obstacle which hinders men from entering in . . . on account of sin . . . Christ by His Passion merited for us the opening of the kingdom of heaven, and removed the obstacle. But by His Ascension, as it were, He brought us to the possession of the heavenly kingdom. And consequently it is said that by ascending He *opened the way before them.*' And just as Agni, whether as Fire or Sun, is himself the door (*aham devanam mukha, Jaiminīya Upaniśada Brāhmaṇa*, IV.11.5), so 'I am the door: by Me if any man shall enter in, he shall be saved, and shall go in and out, and shall find pasture' John, X.9), i.e. shall be a 'mover at will' (*kāmācārin*). In this connection Meister Eckhart comments (I.275) 'Now Christ says "No man cometh to the Father but through Me".' Though the soul's abiding place is not in Him, yet she must, as He says, go through Him. This breaking through is the second death of the soul, and far more momentous than the first.' The expression 'breaking through' may be compared

to both 'breaking through the solar gate' (*sauraṃ dvāram bhitvā, Maitri Upaniśada*, VI.30) and 'breaking through the round of the roof-plate' (*kaṇṇika maṇḍalam bhnditvā, Dhammapada Aṭṭhakatha*, III.66, to be cited again below).

To *hṛdayasyāgra*, 'apex of the heart' corresponds the Islamic *'ayn-i-qalb*, "eye of the heart"; which apex or eye is the Sun-door within you'. Cf. Frithjof Schuon, 'L'oeil du coeur', in *Le Voile d'Isis*, vol. 38, 1933, citing Mansūr al-Hallāj, 'I have seen my Lord with the eye of my heart (*by-ayn-i-qalbī*); I said, Who are thou? He answered, Thyself'; and *Jaiminīya Upaniśada Brāhmaṇa*, III.14.5 where the Comprehensor, having reached the Sun, is similarly welcomed, 'who thou art, that am I; who am I, that one art thou; proceed.'

44. Or those of an arrow, cf. the discussion of *Muṇḍaka Upaniśada*, II.2, above. The Sun, identified with the Spirit (*Ṛgveda*, I.115. 1 etc.) being typically winged (*suparṇa, patańga, garuḍa*, etc.) can be entered into as like unites with like only by a similarly winged principle: in the present context, by the arrow of the Spirit, soaring on wings of sound or light, coincident at this level of reference.
45. Similarly, Shamas-i-Tabriz, *Diwān*, XXIX and XLIV in Nicholson's edition, 'Fly, fly O bird, to thy native home, for thou hast escaped from the cage, and thy pinions are outspread. . . . Fly forth from this enclosure since thou art a bird of the spiritual world.'
46. Cf. the use of *veṣṭ* in Manu, I.49, where creatures are described as 'enveloped by darkness' (*tamasā . . . veṣṭitāḥ*); and *Śvet. Upaniśada*, VI.20, 'Not until men shall be able to roll up space like a skin' (*carmavat ākāśaṃ veṣṭayiṣyanti*)—impossible for man as such.

    It may be added that *veṭhana* = *veṣṭana* is very often employed to denote not merely a wrapping of any sort but more specifically a head-cover or turban. We might accordingly, and with reference to the familiar folklore motif of the cap of darkness (of which the possession signifies an *iddhi* or the sort that we are now considering), have rendered *jhāna-veṭhanena sarīraṃ veṭhetvā pakkāmī* by 'concealing his person by means of the turn-cap of contemplation, disappeared'.

    This provides a further illustration of the fact, alluded to in a previous note, that what is called the 'marvellous' in folk and epic literature, and thought of as something 'added to' a historical nucleus by the irregular fantasy of the people or that of some individual literature, is in reality the technical formulation of a metaphysical idea, an adequate and a precise symbolism by no means of popular origin, however well adapted to popular transmission. Whether or not we believe in the possible veridity of the miracles attributed to a given solar hero or Messiah, the fact remains that these marvels have always an exact and spiritually intelligible significance: they cannot be abstracted from the 'legend' without completely denaturing it; this will apply, for example, to all the 'mythical' elements in the nativity of the Buddha, which moreover are repetitions of those connected with the nativities of Agni and Indra in *Ṛgveda*.

    In the present connection we may point out further that the phraseology of our text throws some light on the nature of the power of shape-shifting and of imposing a disguise on others, which powers are so often attributed, for good

or evil, to the heroes of folklore. If to disappear altogether is really to have perfected a contemplative act wherewith the person concerned in a spiritual sense escapes from himself so that he no longer knows 'who' he is, but only that he 'is', and analogically vanishes from the sight of others who may be present in the flesh, one may perhaps say of the lesser marvel of magical transformation involved in the imposition of an altered appearance upon oneself or others, that this is in a similar manner an investiture (*veṣṭana*) of the body in a form that has been similarly realised in contemplation (*dhyāna*), and thereafter projected and wrapped about one's own or another's person, so that only this disguise can be seen, and not the person within it.

    Finally, it must not be supposed that the actual exhibition of marvels has any spiritual significance: on the contrary the exhibition of 'powers' is traditionally deprecated; it is only that state of being of which the powers may be a symptom that can be called 'spiritual'. It is, moreover, taken for granted that any such powers can be more or less successfully imitated by the 'black magician,' in whom they prove a certain skill, but not enlightenment. There is this great difference in the 'traditional' and 'scientific' points of view, that in the former one would not be astonished, nor one's philosophy upset by the occurrence of an actual miracle, while in the latter, while the possibility is denied, yet if the event took place, the whole position would be undermined.
47. As in Rev. IV.2, 'I was in the spirit' and I Cor., XIV.2, 'in the spirit he speaketh mysteries.' A great deal more than metaphor is intended in Col. II.5, 'For though I be absent in the flesh, yet am I with you in the spirit, joying, and beholding your order.'

    In Rev. XVII.3 'He carried me away in the spirit' (*abstulit me in spiritu*), cf. in the Saṃgāmāvacara *Jātaka* (*Jātaka*, II.92) where the Buddha 'taking Nanda (not yet an *arhat* having the power of aerial flight) by the hand, went off in the air' to visit the heaven of Indra—*abstulit* corresponds to a being *raptus*, which is the consummation of *contemplatio*. In these two cases the state of *samādhi* is rather induced than innate.
48. Cf. *Mahāvagga*, I.21 *antaradhāyi*, 'disappeared', and *Majjhima Nikāya*, I.329 *antaradhayitum* 'to vanish', and *antarhito*, 'vanished.'
49. That is, compressing past and present into the now of eternity; just as in *Śvet. Upaniśada*, VI.20, it is a question of the 'rolling up of space'. Being thus returned into Himself, He is 'The hard to behold, abider in secret, set in the cave (of the heart), the Ancient whose station is the abyss' (*Kaṭha Upaniśada*, I.12); He can be known only by the contemplative, as the immanent Spirit, 'abiding in the vacancy of innermost being' or 'within you', *antarbhūtasya khe, Maitri Upaniśada*, VII.11.

    Expressed in the narrative terms of the myth, creation (in which he might have been seen at work) being a past event is concealed from us because we cannot pursue it at a greater speed than that of light, or in other words are 'not in the spirit', which if we were, the whole operation would be presently apparent.
50. The house of life, the spatial world of experience, is above all a half-way house; a place of procedure from potentiality to act, but of no further use to one whose

purposes have all been accomplished and is now altogether in act. We have already seen the same idea (that of the no further validity of space) expressed in another way by the miracle of the atonement of the four bowls. The cycle symbolised by the building and destruction of the house, or division and unification of the bowls, proceeds from unity to multiplicity, and returns from multiplicity to unity; in agreement with the Buddha's word, 'I being one become many, and being many become one' (*Saṃyutta Nikāya*, II.212).

51. For the *Vedas* as a 'map of life', cf. *Śatapatha Brāhmaṇa*, XI.5.13.

CHAPTER I.10

A Family of Great Mughal Architects*

M. ABDULLAH CHAGHTAI



All the contemporary records, whether official or private, are alike in giving us no particular name of any architect or even craftsman who participated in the building of the Taj Mahal at Agra. This omission is the only reason why different names have been put forward, in an irresponsible way, as that of the architect.

During AH 1048 Shahjahan laid out the planning of his new Delhi under the name of Shahjahanabad, about eight years after the commencement of the building of the Taj. Shahjahan's court historians furnish us with a full account of this construction. They all mention the names of two great architects, Ahmad and Hamid, who were employed there. 'During AH 1048 (AD 1638), the twelfth year of the reign of Shahjahan, an auspicious moment most carefully selected by the astrologers, Ustad Ahmad and Hamid, who were counted among the most expert architects and recognised leaders in the art of building, began the work in compliance with the royal commands under the care of Ghayrat Khan, the nephew of 'Abd Allah Khan Feroz Jang, then responsible for the administration of Delhi as well as for laying out the foundations of buildings in accordance with the designs which had already been approved by the emperor; and such designs had never been seen before in the world.'[1]

So far as this mention of the names of Ahmad and Hamid, the architects of Shahjahan's period is concerned, it must be admitted that this

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is the only reference which we could find and it is exclusively in connection with the Delhi buildings of the time and says nothing about the Taj, although it had been begun eight years earlier. These two names of architects, in addition to a few more, are found again in an inscription on a metal plate in the mausoleum of Hoshang Shah at Mandu, which is dated AH 1070,[2] and is inscribed by 'Lutf Allah, son of Ahmad, the architect of Shahjahan'; in translation it reads thus:

> On the 9th of Rabi 'II of the year AH 1070 (14 December AD 1659), the humble beggar Lutf Allah, engineer (*muhandis*), the son of Ustad Ahmad, architect of Shahjahan, Khwajah Jadu Rai, Ustad Sheo Ram and Ustad Hamid had come on pilgrimage (to this tomb) and wrote these few words to commemorate it.'

It has been supposed that Ahmad and Hamid were brothers, which seems improbable since wherever these two names occur this relationship is not mentioned; and Lutf Allah, who constantly insists on his identity as the son of Ahmad, could easily, in the same way, have mentioned that he was the nephew of Hamid, or that the latter was a brother of Ahmad. Moreover, Lutf Allah could have mentioned it in his collection of verses hereinafter noted in which he has almost given the history of his family. As for Hamid, it is interesting to note that even to this day there is a lane in Delhi near the Royal Mosque which is named after an Ustad Hamid, and it is said that his descendants still reside there, and are called *Sadah-Kār* (goldsmith). But we cannot definitely assert it to have been the same Ustad Hamid.

The inscription of Mandu cited above bears the date AH 1070, i.e., the second year of the reign of Aurangzeb—before which we have no notices of real Mughal architecture at Mandu except a gateway repaired in 'Alamgir's period. Aurangzeb, with his accustomed foresight and his desire for the preservation of old relics from destruction, rebuilt the gateway—a lofty entrance to Mandu fort which now bears an inscription in verse to the effect that it was repaired by the emperor's orders.[3] In point of its beauty or its towering height this gate is in no way inferior to the famous gate of Akbar's grand mosque at Fathpur Sikri. It can be assumed that the architects whose names are mentioned in the inscription of Hoshang Shah's tomb came to Mandu to survey the monuments which needed repair, and, possibly, the gateway is their work. I was unable, however, to find any other mention of Hamid's name besides this.

Ahmad's son, Lutf Allah Muhandis, was not only a great architect and engineer but also a mathematician, astronomer, poet, and calligrapher

of merit, as is obvious from the various sources discussed in the following pages which show that he wrote books on these subjects. We are so fortunate as to possess the *Diwan* of his poetry, which furnishes us with most useful information as regards his family.[4]

The translation of one of his long poems given below shows that his father Ahmad, besides being a great architect, was an authority on standard works on mathematics and astronomy, like *Al-Majast*. His three sons, 'Aṭā' Allah, Lutf Allah and Nur Allah, were also of repute in their respective arts. The translation reads us follows:

> Shahjahan, the just ruler of the globe, is the light of the dynasty of *Ṣāḥib-i-Qiran* Taymur.
>
> The high heavens serve as the dome of his pavilion and the threshold of his court is an envy for the heavens.
>
> Ahmad, who was a hundred paces ahead of experts in his own art, was thoroughly conversant with Euclid's propositions, the figures and other details concerning them.
>
> He had full command of the sciences of the stars and knew the mysteries and solutions of *Al-Majast*.
>
> On the part of the just Emperor the title of Nadir al-'Asr [the wonder of the age] was conferred upon him.
>
> He was the architect of that monarch, his opinion carried weight in that auspicious presence.
>
> When Agra became the place of encampment of the Emperor's banners, the Emperor piled his royal favours upon him and this conqueror of kingdoms commanded him to build the mausoleum of Mumtaz Mahal.
>
> Later, by Shahjahan's, the world-protecting, just Emperor's command, who held the sway over innumerable armies, Ahmad, the sagacious and talented, built the peerless Fort of Delhi which has no parallel.
>
> These two magnificent edifices, which I mention here and for the description of which I have wielded my pen, represent only one aspect of his many-sided genius and constitute a pearl out of his mine of pearls.
>
> As this material world is not a place of permanent abode, he made a journey towards the next, eternal world.
>
> Three sons survived that illustrious man and of them 'Aṭā' Allah Rashidi[5] was the eldest.
>
> He ['Aṭā' Allah], who had no equal, was the wonder of his age, the celebrity of the city of the universe, an erudite scholar, a scholar of distinction and an experienced veteran of the world.

A cherisher of the fine arts and a past master in his own profession, a scholar, wise and learned, of the age.

His compilations are a treasury of knowledge and the books he himself has written are the storehouse of great arts.

His prose is even purer than the flowing water and his poetry is so well arranged that even the string of pearls is shamed by it.

I, who lay claim to poetry and intelligence, feel myself a servant [inferior] of that profound scholar.

I, who have carried off the ball of knowledge from the world, have obtained that fragrance of knowledge from his garden.

I, who am acquainted with the mysterious powers that lie hidden in finger tips, have got the food of the soul from his breath.

I am the second of the three brothers, and among my various accomplishments engineering may be counted as one.

Although *Muhandis* [engineer] is the royal title which the Emperor has conferred upon me, the name of me, the distressed one, is Lutf Allah.

Nur Allah, the accomplished, is the youngest of the three brothers.

We, all of us, are architects and builders. We all are masters and lovers of poetry.

But the palace of his [Nur Allah's] elocution in wonderful, therefore he is known by the title of *Mi'mar* [architect] par excellence.

Though he is junior to me in age yet his attainments surpass mine.

His prose scatters pearls more profusely than verse, and his verse keeps pace with his prose.

His illuminating writings dazzle the eye with their light and the gracefulness of his speech purifies the mind.

The palm of his hand contains the treasures of art and the tip of his finger produces the seven styles of calligraphy.

Though I am, no doubt, a master of art yet he and he alone is my master. And though I, alone, am known as *Muhandis* yet, in fact, [all] the three brothers are a repository of engineering skill.

In his great work, *Mir'at-i-Wāridāt*, Muhammad Shafi' Naginavi has described some of the prominent buildings of the time of Shahjahan. He devotes a lengthy passage to the palace of Nawab 'Asaf Khan at Lahore of which the construction is attributed to Ahmad, the architect. The building is described—in the usual flowery style—as an architectural wonder without its like in the world. But when the Nawab was taken round the house and adjoining places therein, he was displeased and

spoke in angry terms to Ahmad the architect: 'O low-natured fellow! Perhaps you were under the impression that my treasury was running short of funds. On account of want of courage and a narrow outlook, you have built such a palace that a man cannot stretch his legs in it.' Master Ahmad, who was expecting great appreciation and ample reward for his labours, was struck with disappointment and said: 'Of course, Your Excellency's royal legs cannot be stretched in this house, the like of which, under the skies above, has never been seen by any aged person since the time of Adam. I am sure, your royal legs will never be stretched anywhere except in the dark corner of the narrow grave!'

'. . . The Khan, who was just and quick to understand, burst into laughter and promptly this appropriate reply was followed by a reward of one lakh of rupees, and a special *khilafat* (robe of honour) to add to his honours.'

'After the demise of 'Asaf Khan that house was selected for the residence of kings. But no king after this has ever shown the courage to repair the damages.'[6]

Besides this, there is a collection of letters of the days of Shahjahan and Aurangzeb in my possession, which includes one addressed to Nawab Ja'far Khan. Its subject is the construction of the forts of Shamshergarh and Hasan Abdal under the architectural supervision of Ustad Ahmad. Nawab Ja'far Khan was governor of the Punjab in AH 1055; he became 'Alamgir's minister in AH 1074 and died in AH 1081.

Turkish historians[7] have recorded the names of two architects: Yusuf and 'Isa whom Babar brought with him to India, and of whom no mention is found either in Babar's Memoirs or in any Indian history. There is not the least room for doubt that the great Turkish architect (Mimar) Sinan had two eminent pupils, Yusuf and 'Isa. A ms in the Berlin Library,[8] dated AH 1099, shows as its author's name Lutf. It is just possible that the architect Yusuf who came with Babar to India and Ahmad's father are one and the same person. In the course of my researches I have traced one architect Yusuf who built the fort of Shahpur in the Gulbargah district of the Deccan by order of Sultan Ibrahim 'Adil Shah in AH 962. The inscription in question[9] mentions his full name as Muhammad Yusuf. It is a mere conjecture that he may be the same man who came to India with Babar; he may have been left in India, and during the turmoil of Humayun with the Suris may have migrated to the Deccan, where he had the opportunity to show his genius in architecture. It is by no means impossible that he was the father of Ahmad, for the latter—as is obvious from the works of Lutf Allah mentioned above—lived to a very great age. As for the second of Babar's architects, 'Isa, no such

name of any architect is so far traceable in India, although an astrolabe maker Mulla 'Isa lived in India in the days of Akbar.[10]

It is perhaps of some importance to note here an inscription[11] mentioning the name of an architect Ahmad which still exists at Margallah in Rawalpindi district [Pakistan]. It concerns the construction of a pass during the reign of Aurangzeb in AH 1083/AD 1672; but the date of the death of our Ustad Ahmad—about twenty years before then—makes one hesitate to associate this inscription with him. It seems possible, however, that Ahmad was entrusted with this work and died before its completion.

Mulla Farid Ibrahim (d. AH 1039), Shahjahan's court astrologer, mentions in the introduction to this great work *Zich-i-Shahjahani* ('Shahjahan's Observatory) that in its preparation he had greatly benefited from a great expert, Mulla Ahmad.[12]

It all goes to prove that Ahmad was really a great engineer, architect, and mathematician as well as a man of great literary attainments. And particularly in the architectural domain he embellished almost all the principal Mughal towns of Shahjahan's period—Agra, Delhi, Lahore, and so forth—with splendid edifices most of which are extant to this day. Undoubtedly the grandeur and delicacy embodied in these monuments reflect the genius of a very great architect.

Lutf Allah has recorded the date of his father Ahmad's death in two chronograms of his poems: AH 1059.

According to the above-quoted verses from the *Diwan* of Lutf Allah, the eldest son of Ahmad was 'Aṭā' Allah. He was the author of two standard works on mathematics, *Panj Gint* (on algebra) and *Khulasah-i-Raz* ('A Summary of Arithmetic') of which mss have been preserved in many libraries.[13] I have used the British Museum ms. The Algebra begins thus:

> The Algebra by 'Aṭā' Allah Rushdi, son of Ahmad Nadir [*sic*], with divine help, in AH 1044 corresponding to the 8th year of the coronation of *Ṣāḥib-i-Qiran* (Shahjahan)—the book on algebra known in Hindi by the title of *Panj Gint*, which in fact is the book *Līlāwati* written by Bhaskar Acharaj: a fine book on mathematics translated from Hindi into Persian with all the proofs, solutions, secrets, etc., mentioned therein which were not found in any Persian or Arabic book. I begin the preface of the book with prayer for the sovereignty of Abu'l-Muzaffar Shihab ad-Din Muhammad Qiran-i-Thani, Shahjahan Badshah Ghazi . . .'

A collection of mss on mathematics in the British Museum consists of

Muntakhab by Lutf Allah Muhandis, son of Ahmad the architect of Lahore, and *Khulasat al-Hisab* or *Khulasah-i-Raz* by 'Aṭā' Allah son of Ahmad. But the latter work, which is in verse, does not bear his *nom de plume* Rashidi or Rushdi. 'Aṭā' Allah has dedicated it to Prince Dara Shikoh and has given some verses about himself. From a close examination of the verses of both Lutf Allah and 'Aṭā' Allah it appears that this family was specially attached to Dara Shikoh.

The preface of *Khulasat al-Hisab* begins with the usual praise of God, and contains eulogies of the Prophet, Shahjahan and Dara Shikoh; it ends with 'the author's humble submission' in which there is mention of his father Ahmad, the 'Chief Architect of the Kingdom'. From this we may infer that the treatise was written during the life-time of Shahjahan, when Dara Shikoh was also at the height of his dignity and glory. 'Aṭā' Allah states that he, too, belonged to Shahjahan's court, though he was in government services also in the days of 'Alamgir. On the death of Dilras Banu Begam Rabi'ah Durrani, wife of Aurangzeb and daughter of Shahnawaz Khan, who died at Aurangabad on the 8th October, AD 1657, from illness following the birth of her son Muhammad Akbar and was buried outside that city, the designing and planning of her mausoleum at Aurangabad was entrusted to 'Aṭā' Allah.[14] I have often visited the mausoleum at Aurangabad. It is a true replica of the Taj on local stone. On the doors there are inscriptions on brass plates:

> This gate was made under the management of the honourable Abu'l-Qasim Beg, *Dārōgah*.
>
> This splendid mausoleum was completed by 'Aṭā' Allah the architect under the governorship of Haybat Rai's in AH 1071.

More or less the whole account of Ahmad and his family is due to the information supplied by his son Lutf Allah in his many works. His most popular work is known as *Khulasat al-Hisab*, a commentary on Baha ad-Din 'Amali's[15] great work on arithmetic, which is found in almost every library. I have my ms of which the introduction runs thus:

> All praise is due to God . . . After that it is remarked that the humble Lutf Allah, surnamed *Muhandis* (engineer), the son of Ustad Ahmad, *Mimar* (architect) of Lahore, has written this treatise on the science of arithmetic and the characteristics of numerals. May God bless his work! This work is a translation and commentary of the great work of Shaykh Baha' ad-Din Muhammad b. Hasan 'Amali on Arithmetics dealing with the elements and principles of that subject, which he has undertaken at the instigation of Mir

Muhammad, belonging to the family of the minister Sa'id b. Mir Muhammad Yahya, and he has named this *Khulasah* of 'Amali's Muntashib which is a chronogrammatic name of the date of its completion (AH 1092).

His second compilation is on arithmetic which he has styled *Risalah i-Khaws-i-A'dad* or *Arismatiqi* ('Arithmetic'), following a similar work of Ibn Sina. I have seen two mss of it, one in the British Museum[16] and the other in the Hyderabad Sa'idiyyah Library. He undertook the Persian translation of *Suwar-i-Sufi* of 'Abd ar-Rahman Sufi (d. AH 376). He did it at the suggestion of his father Ahmad as is clear from the introduction to the same. This treatise on astronomy is illustrated with proper diagrams of the stars, etc. He also made an abridgment of the popular work on the biographies of Persian poems, *Tadhkirah-i-Dawlatshah Samarqandi* under the name of *Asman-i-Sukhan* in verse.[17] Dr Sprenger has specially mentioned it in his catalogue the mss of the Kings of Oudh. The collection of his poetry already mentioned is indispensable as far as his family history is concerned.

Very lately I have come across an ms of his only work on ethics, *Sihr-i-Halal* ('Lawful Magic'), till now unknown. No one has ever attributed to him such a work. Mr Muhammad Ghouse of the Hyderabad Diwani Department brought it from a well-known *madrasah* library and very kindly lent it to me for study.[18] The peculiarity of this work lies in this that the author has—simply with a view to show his perfect mastery over literature and thorough command of the language—avoided the use of letters bearing dots (*nuqat*) in the Arabic script. The treatise was composed in the month of Muharram, AH 1070 (AD 1660), and is divided into subheads: Praise of Justice, Eulogy of Humanity, Reproof of Envy, Reproof of False Hope, Reproof of Greed, Reproof of Negligence, Praise of Hard Work, Praise of Acquiring Knowledge, Praise of the Heart, Praise of the Beloved and the Generous, Desire of Meeting the Beloved, Reproof of Desire, Of Eternal Attachment, Praise of Hope, Praise of Uttering Salutation, Account of the Generous.

Mulla Tughra addresses one of his letters to Lutf Allah in which he expresses warm approbation of his art of calligraphy instead of commending the merits of his high attainments in mathematics. He also acknowledges the receipt of a pamphlet which Lutf Allah had sent to him as a specimen of his penmanship, and particularly extols his great care for the finest paper and finest ink for the production of the best specimens of penmanship.[19]

Lutf Allah mentions in his verses that he once built a palace for Prince Dara Shikoh of which he had also composed a chronogram on its completion: it comes to the year AH 1060, but he has not mentioned where this palace was. He once made a key at the order of Prince Dara, of which the chronogrammatic date is AH 1066; and he composed the chronogram of the betrothal of Dara Shikoh's son Sulayman Shikoh, AH 1064. This family was, as has been said, strongly attached to Dara Shikoh, and when the kingdom changed and Aurangzeb came into power this family's connection with the court, I think, was not so active or so close.

From the above-quoted accounts of Lutf Allah, both in his *Diwan* and *Sihr-i-Halal*, we find that the youngest brother Nur Allah was also a versatile genius like the eldest brother 'Aṭā' Allah. It is a pity that no mention of any work is forthcoming to support the assertion. We find the name of Nur Allah son of Ahmad at the end of an inscription[20] on the last arch of the western façade of the Royal Mosque at Delhi, giving some information about Shahjahan and the mosque. Hence it seems possible that Ahmad's sons worked under their father who, in conjunction with Hamid, was the architect of the mosque.

Other members of this family were also engineers and poets. In many biographical works we find the catalogue of the Oudh mss that he was called Imam ar-Riyadi ('Leader in Mathematics') and that be was a native of Lahore and resident in Delhi. He was a son of Lutf Allah Muhandis and a contemporary of the author of *Hamesha Bahar* who composed his work in AH 1136 and died in AH 1146. He was a poet and many specimens of his verses are found in anthologies. One of his pupils wrote a commentary on *Al-Majast*.

Abu'l Khayr Mirza Khayr Allah, the second son of Lutf Allah, flourished during the early days of Muhammad Shah's reign and was known, for his command of mathematics and astronomy, by the title of Muhandis, which had been his father's surname. He has been properly mentioned, in the course of the account of his brother Imam ad-Din ar-Riyadi, by the author of *Safinah-i-Khushgo*, Bindra Ban Khushgo, who died in AH 1170. He mentions that his (Imam ad-Din's) brother Abu'l-Khayr, known as Khayr Allah, was matchless in astronomy and geometry. Accordingly Rajadhiraj Jai Singh Sawai, landlord of Amber (known afterwards as Jaipur) who was thinking of erecting observatories, spent about 20 million rupees for the same in consultation with Abu'l-Khayr, who was an outstanding authority on that particular branch of science.[21] He had translated Tusi's (AH 672) great work *Tahrir Uqlaidas* under the name of *Taqrir at-Tahrir* from Arabic into Persian and also Tusi's second work *Tahrir Majasti*, under the name of *Taqrib at-Tahrir*.[22] He had written comments on Tusi's work on the astrolabe.[23] Moreover, as mentioned above in a footnote to the account of 'Aṭā' Allah Rushdi, he had added comments on his uncle 'Aṭā' Allah's *Panj Gint* which I have

seen in the Sa'idiyyah at Hyderabad. He had also written commentaries on the early Persian poets, *Sikandarnamah*, and the latter has already been published at Delhi. Mirza Khayr Allah Muhandis had a son Muhammad 'Ali known as Riyadi (mathematician). His father had left *Taqrib at-Tahrir* in incomplete manuscript form; he revised it and added an important introduction. Later on he used to impart education in mathematics to others, and wrote some important treatises on the same topic. The introduction of the *Taqrib at-Tahrir* shows this.[24]

After Muhammad 'Ali I can find no member of this family who can claim to be a direct descendant of Ustad Ahmad. But one Muhammad Aman Nithar, an Urdu poet and architect, has been mentioned by the author of *Majmu'ah-i-Naghz* as claiming to be the descendant of those architects Ahmad and Hamid who had built the Delhi Royal Mosque of Shahjahan. This Muhammad Aman Nithar is the same Urdu poet who spontaneously composed a poem in response to Mir Taqi Mir's *Ayjdarnamah* and the audience paid him a high tribute.[25]

Notes and References

1. Mulla Muhammad Salih Kamboh, *'Amal Ṣālih*, BM. ms, Add. 2,622. The printed edition of the Bengal Asiatic Society, Calcutta, ed. G. Yazdani, bears (vol. III, p. 28) the year 1708 instead of 1048, and only Ahmad's name instead of both Ahmad and Hamid. Therefore I was obliged, when in London, to obtain photostats of the British Museum ms and I used also the *Bādshāh Nāmah* of Muhammad Warith, ms of the Bodleian Library, Oxford, Cops. ord. 3.
2. *Epigraphia Indo-Moslemica*, 1909–10, p. 23.
3. Ibid., p. 20.
4. Sayyid Sulayman Nadvi presented the ms of the *Diwān* of Lutf Allah at the first meeting of the Idarah Ma'arif Islamiyyah, Lahore, 1933, in an article, 'A Family of Engineers who built the Taj and the Delhi Fort', *Journal of the Bihar and Orissa Research Society*, vol. 34, 1948, pp. 75–110. The *mathnawi* here quoted belongs to the same Diwan. See the Idarah's Report, 1935, and *Kāravān* (Urdu Annual), Lahore, my article on the Taj's architect. I am very much indebted to my friends, Prof. M. Ibrahim, Gujarat College, Ahmedabad, and M. Altaf H. Bukhari, Research Scholar, Punjab University, for the help they have rendered me in the translation of the above poem.
5. In some mss he is noted as 'Rushdi' instead of 'Rashidi'.
6. Today it is very difficult to locate the site of this house of 'Asaf Khan at Lahore.
7. Muhammad Asad, *Turkish Art* (Istanbul, 1928) (Arabic), p. 23.
8. *Die Handschriften-Verzeichnisse der Königlichen Bibliothek zu Berlin*, Berlin, 1853, p. 582.
9. *Epigraphia Indo-Moslemica*, 1933–4.

10. Cf. Sayyid Sulayman Nadvi, 'Some Indian Astrolabe-Makers', *Islamic Culture*, October 1935.
11. *Epigraphia Indo-Moslemica*, 1933–4, pp. 21–2.
12. I had the opportunity to consult the ms of the *Zich* of the British Museum (Or. 372). But when I later consulted the ms of the same work in the State Library of Hyderabad (Deccan)—*Catalogue*, vol. I, 814, no. 302, I saw that it bears the name Muhammad Ahmad, although I am not quite sure as to the first word; anyhow, the word Ahmad is quite clear. But it is a fact that the latter ms, especially this portion, is very lately written by some incompetent hand.
13. I have come across two mss of *Panj Gint*, one in the British Museum (Add. 16, 1,869) and the other in the Sa'idiyyah Library, Hyderabad. Both bear the author's name in the Preface—of which a translation is given above thus: 'Aṭā' Allah Rushdi and not Rashidi, as in the verses quoted above, although the meaning of the words is almost identical. A further proof of its being Rushdi is that the ms of the Sa'idiyyah Library is dated AH 1145, i.e., the fifteenth year of the regin of Muhammad Shah. Fortunately, it has passed through the hands of various authorities on the subject, who have added their own comments on the margin and have signed them, such as Mirza Khayr Allah, the nephew of 'Aṭā' Allah himself and son of Lutf Allah: other notes have been made by 'Abid and Jamil who were authorities on the subject in their days. Under these circumstances I have adopted the spelling Rushdi instead of Rashidi.
14. The *Aurangabad Gazetteer*, 1833, has only 'Aṭā' Allah's name.
15. Baha' ad-Din 'Amali died in AH 954. See Hajji Khalifah's *Kashf az-Zunūn*.
16. *British Museum Catalogue*, Add. 16,744.
17. Sayyid Sulayman Nadvi has fully discussed Lutf Allah's writings in his article referred to in note 4 above.
18. Library of Madrasah Muhammadiyyah, Madras, no. 2,686; and by chance I was given a recently published descriptive catalogue of the Arabic, Persian, and Urdu mss in the library of the Bombay University, by K.B. Sheikh Abdul Qadir Sarfaraz. I came across therein a mention of *Sihr-i-Hala* (no. 27) which the cataloguer had attributed to Nur Allah, the younger brother of Lutf Allah instead of Lutf Allah. I at once came to Bombay and saw the actual ms. On the outside of the fly-leaf is the title of the book as well as the author's name Lutf Allah which is to some extent blurred but with care can easily be deciphered. Thus, no doubt remains as to Lutf Allah's authorship.
19. *Rasd il Mulid Tu*, Lucknow edition.
20. Sir Sayyid Ahmad Khan, Lucknow, AH 1293, vol. II, p. 9.
21. *Bankipore Library Catalogue*, p. 103, no. 25.
22. *Persian Catalogue of the India Office Library*, Ethe. 2,260 and *Bankipore Library Catalogue*, vol. II, p. 70.
23. *Bankipore Library Catalogue*, no. 1,045.
24. See Sayyid Sulayman Nadvi's article referred to in note 10 above..
25. Prof. Shirani, 'Mir Qudrat Allah's Majmu 'a-i-Naghz', *Oriental College Magazine*, Lahore, 1932, p. 42.

CHAPTER LII

The Qutub Complex as a Social Document*

MUHAMMAD MUJEEB



The memoirs and reports and lists of Delhi Monuments published by the Archaeological Survey of India contain complete and detailed information about the groups of buildings which constitute the Qutub complex and other related material which is beyond the scope of this paper. My purpose here is not to reproduce all that information in an abbreviated form. I have had to study Indian architecture for a book I wrote some eighteen years ago on ancient Indian culture and now for lectures on Indian Muslim architecture. I am not a specialist in any sense. I can only present certain methods of approach that have occurred to me in the attempt to make architecture intelligible and interesting to myself and to my students, and I have selected the Qutub complex as the subject of this article because it is particularly useful for this purpose.

The study of my specimen of architecture consists, I feel, in reading the architect's mind to discover how he adopted techniques and selected material for the construction of the building, the purpose of which was known to him. In reading the architect's mind we are moved by the same sentiments; we participate, as it were, in the planning, in the choice of ways and means, in the execution of the plan and in the assessment of the completed work. It may bring us no joy if we feel from the start that the architect was content to imitate or to follow a fashion, to use the prevalent techniques and the most easily available material, and to look forward to no appreciation beyond what is shown by the unimaginative for

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work which did not involve exercise of the imagination. We may, on the other hand, share the rapture of the artist who discovered the most perfect harmony between purpose and design, and find that the plan, the techniques, the material, and the proportions of the created work reduce themselves to a single moment of exaltation. It is this experience which assures us that the beauty of architecture is the beauty of poetry, music, painting and sculpture, and the great artist can enable us to overcome our imperfections and realise the underlying unity of all art.

Unfortunately, we tend to impose many limitations on ourselves. In Indian architecture, for instance, we consider first the categorisation—is the building Hindu or Muslim? Then we look at the size, the costliness of the material, the names and dates of the builder and the building. We also overlook certain basic facts of the history of architecture. The technique of corbelling, that is, projecting stones or bricks of the upper layer over the lower so as to make an arch or a ceiling, and the use of the beam and post, or the trabeate system, are much older and more universal than Hinduism; the use of the arch and dome, or the arcuate systems, was developed by the Romans and is much older than Islam, but we have labelled one system Hindu and the other Muslim. We look everywhere for borrowed elements. I do not mean that there are no differences between Hindu and Muslim architecture or that they should be ignored. The temple and the mosque represent two different concepts of worship, and cannot, therefore, be built in the same way. But if we begin, as we should, by understanding the purpose of the structure and then attempt to read the architect's mind, we shall appreciate the beauty of the created work without being misled by irrelevant considerations.

What we have to remember, I think, when studying Indian monuments, is the difference between architecture and sculpture. While trying to explain the difference to my class, a definition of both these arts occurred to me, which my artist friends have since assured me is fairly apt and comprehensive. Architecture is creation with material; sculpture is creation out of material. The canvas of the architect is space; in space he creates a form by putting together whatever material he builds with. The canvas of the sculptor is the material itself, out of which he makes a particular form emerge. A very small building can be a specimen of architecture; a very large building, or even a complex of buildings can be an example of sculpture. Not only the Kailash Temple of Ellora, which was in fact sculptured, but many other temples have been deliberately given an outline which creates the impression that they were not built with but hewn out of stone, and are sculptures on a gigantic scale. Between the definitely architectural and the definitely sculptural we can have variations

of approach. The architecture of Gujarat is generally characterised by a sculptural approach, though there are also buildings, like the Jami Masjid of Sarkhej, where the influence of sculptural standards is completely absent. We could say that up to a certain time in Indian history the aesthetics of sculpture dominated architecture. During Muslim rule sculpture may not have been patronised to any appreciable extent, but the stone masons and sculptors certainly did not give up their profession, and they took their time to accept the aesthetics of architecture. It would be fairer and more precise not to make distinctions on the ground of religion when the real difference lies in the degree to which the standards and aesthetic principles of sculpture and architecture have been applied in the planning, the construction and the ornamentation of a building. If we bear this in mind, a study of the Qutub complex becomes an exciting intellectual and aesthetic adventure, and gives history another perspective.

I cannot here dilate upon the purely archaeological problems. We know that the Quwwat-al-Islam mosque grew with the Muslim population of Delhi. As constructed originally, in AD 1199, it would not have accommodated more than 2,000 persons. Its final extension by Alauddin would have made it sufficient for ten or fifteen times that number, if not more. These extensions have been traced out without much difficulty by archaeologists, and fairly reasonable and convincing reconstructions have been made to show what the mosque looked like after its first extension by Iltutmish and second extension by Alauddin. Here I propose to consider only what is still standing, and can be seen and judged by those who do not have the imagination and the training of the archaeologist.

The Turks who occupied Delhi came from an area in which both brick and stone were used in building, but architecture in brick, such as we see in the oldest monuments of Bukhara, would have set the standard. Along with brick structures, the art of making tiles had been developed and was making continuous progress, both aesthetically and technically. On the other hand, sculpture and stone-masonry practised in the Greek colonies of Bactria and Gedrosia would not have died out. Thanks to Alauddin Jahansoz, we cannot now say whether Ghazni was mainly a city of brick or of stone or of wooden structures. But we may be certain that those who thought of building a mosque and a *minār* at Delhi were thinking in terms of architecture and not sculpture. Construction in wood was ruled out; bricks were not available; they could only build in stone.

There is an inscription above the northern entrance to the Quwwat-al-Islam mosque stating that the material of twenty-seven temples was

utilised for its construction. If this was done after the people of Delhi had submitted, it was certainly against the *shari'ah*, but there would hardly have been any among the Turks occupying Delhi whose conscience would have troubled them on that account. We must, however, unequivocally condemn the action. Some of the temples would no doubt have been damaged and desecrated during the fighting, and they would have been abandoned for that reason. But the inscription indicates that these temples were deliberately dismantled, and it was not only a matter of utilising the material of temples destroyed as an act of war.

While the moral and legal issue is clear, however, the question of who carried out the dismantling has still to be answered. We can assume that Hindu stone masons were forced to do it, or that Muslim masons were employed. In any case the work was done by stone masons. If they had been Muslims brought over from the Punjab or beyond they would have known the technique of building true arches and we would have had corbelled arches in the screen of the Quwwat-al-Islam mosque. As it is, the true arch appears for the first time in the Alai Darwaza, built in AD 1311. We must assume, therefore, that the stone masons were Hindus. And not only in this first instance. It appears from an inscription on the fifth storey of the Qutub Minār that the repairs and additions in the reign of Firoz Tughlaq in AD 1368 were carried out under the supervision of a master-mason named Nana Salba, son of Chahada Dev Tala.

The stone masons employed for dismantling the temples and building the mosque would not all have been residents of Delhi. The city was not large enough to provide continuous employment for any considerable number of stone masons, unless we assume that a good proportion of the twenty-seven temples mentioned was in the process of construction. Family group or communities of stone masons and sculptors generally migrated from one place of work to another, remaining settled for as long as was necessary to complete a particular project. Many such families and groups would have been collected in haste from near and far, for the mosque had to be built soon and the Minār was to follow.

What would have been the attitude of these stone masons and sculptors to what they were asked to do? Would they have undertaken it for fear of losing their lives, with hatred seething within them? That would be the logical deduction, considering what had happened. But, then, would not their feeling have affected their work? Cunningham has pointed out some technical defects in the construction of one or two corbelled ceilings and their supports in the south-western corner of the mosque colonnade, and attributed them to haste. But the later extensions have

not stood the test of time as well as the original mosque, and instead of any evidence of slipshod work we find unimpeachable examples of free, creative effort. The stone masons were not submissive instruments. They must have asserted themselves as technicians, and also exercised their imagination to appreciate and their skill to realise in practice the architectural values they were asked to express.

There are many mosques in India with colonnades around their courtyards, but none in which the eastern side has been so definitely emphasised. The gateway built by Iltutmish and the Alai Darwaza are on the southern side, because the city lay to the south. But the main gateway of the original mosque, like the entrance to a temple, is on the east, and the columns on this side are four deep, while those on the north and south are only three deep. Does not this imply that the stone masons, or their chief, feeling instinctively that the eastern colonnade must represent the vestibule of a temple, insisted that this should be emphasised, and had his way? The screen, which stands opposite, was probably the central feature, following a prevalent style in mosque construction which was further developed in different parts of India. It must have been higher than the domes of the covered area behind it. What remains of the screen now is the central arch and three of the four low arches which flanked it, two on each side. Originally, one would have looked through the central arch into the shadowy interior, and felt that passing through it one would enter the world of the spirit, of calm and quiet contemplation of the divine. Now one looks through it into space and feels that in isolation and decay its beauty has acquired another and far richer meaning. I remember taking the Russian artist Magda Nachmann to the Qutub over twenty years ago. Once she had seen this arch she would look at nothing else. She stood before it in rapturous silence and wept when it became dark and we had to return. And indeed, if we look at the arch and take in its beauty, we feel that it is something that can be translated into many forms and many moods, into the peace and tranquillity of the Buddha image, into the timeless contemplation of the Trimurti of the Elephanta Caves, the ecstasy of the sufi, the poet's dream of a loveliness that eludes the drapery of woods. It is something beyond architecture and beyond sculpture, a chiselling out of space that creates the framework for endless horizons of thought and feeling.

I referred earlier to reading the architect's mind in order to understand his work. Archaeologists have found inscribed, on a pillar of one of the arches of the screen, and again near the entrance to the Minār, the name of Fazl-bin-abi'-l-Maali as superintendent of the works. He may have

been an Arab or an Iranian or a Turk. He may have been a genius in the art of communication as well as of architecture, able to design beautiful and impressive monuments and to explain to masons who did not know his language how to build what he had designed. But if he were a Muslim from outside India, would he have designed corbelled arches, knowing that they could stand much less weight than true arches? We can be sure that he would not. It must have been the Hindu masons who insisted on building according to their traditional techniques, disclaiming all responsibility for the stability of the structure if any other technique was followed. And when this had been agreed to, they must have made their own calculations of the width and height and the massiveness of the supporting piers. This explains the exquisite proportions of the central arch. Its quality of being eloquent and alive, its rising upward with a moving, natural grace, the two sides meeting not with a mathematical precision, but as it were by mutual attraction, with an upward tilt at the meeting point symbolic of the joy of union.

But this is only a part of the sculptors' contribution. I imagine that the suggestion of making the decorative reliefs sweep instead of running horizontally, as in temple decoration, must have appeared to the stone masons as an exciting novelty, and their enthusiastic response is evident in their work. Among the decorative bands are verses from the Qur'an, inscribed in bold relief. The architect may have known of a mausoleum in Uzkund, built in AD 1187, where the Quranic inscription has a setting of flowers and foliage, and have proposed to do the same here. But while the floral setting in the Uzkund monument is stylised and repetitive, the setting in the Qutub screen is naturalistic, warm, and vocal. The Hindu sculptor did not know anything about the doctrine of revelation, he knew only about nature, and instinctively he has represented the Qur'an as an utterance of nature, the voice of leaves and flowers, the whisper of the woods.

Some thirty years later, the mosque was enlarged, and the screen extended to maintain symmetry. The arches of this screen do not have the same proportions. In the relief work on their frontage there is stiffness and austerity; the exuberant naturalism of the earlier work has given place to something severely geometrical. An archaeological expert has expressed the view that this relief work is in the Saracenic style, and must have been executed by imported craftsmen. This is unlikely. The arches are still corbelled; there is still lack of faith in the strength of the true arch. As for the ornamentation, it is doubtful if a sufficient number of skilled stone masons would have been found in the neighbouring

Muslim principalities or would have been worth recruiting when so much skill was available in India. Besides, Persian and Central Asian ornamentation is of tiles or inlay, and depends for its effectiveness very largely on colour compositions. On the screen built by Iltutmish and on the inner walls of his tomb the patterns may be similar, but they have been executed on different material. They are neither plastic nor colourful and give the impression of overloading. The craftsmen must have been Hindus or Indian Muslims, but because more than a generation had passed since the construction of the first screen, they would be new men, less imbued with the sculptural traditions of their fathers. In any case, a change was bound to come, with architecture seeking independent self-expression.

In the context of this aesthetic struggle, the Qutub Minār stands midway between the first screen of the Quwwat-al-Islam mosque and its extensions. It was built in two stages, the first storey in AD 1199, and three storeys by Iltutmish in about AD 1230. Firoz Tughlaq repaired the Minār because it had been damaged by lightning, and very unwisely converted the fourth storey into two. He somewhat increased the height of the Minār, but also introduced incongruous elements. Apart from the alteration made by Firoz, the Minār would have been planned as a whole, Iltutmish completing what Qutubuddin Aibak had left undone. An inscription—the lower band on the second storey—states that Iltutmish ordered the completion of the Minār.

What was the idea underlying the Minār? It would have gratified the religious if it were called a *mazna*, a lofty tower from which the muezzin called the faithful to prayer. There are examples of such *maznas* in Muslim countries, but probably not as tall as even the first storey of the Minār, which is 95 feet high. There are also examples of free-standing *minārs* which have an architectural significance of their own. The tower we now call the Qutub Minār has not been so called in the contemporary histories. It could have been used as a *mazna*. But its architectural qualities most probably derive from the fact that a small group, determined to occupy and rule for all time as much territory as it could, found it necessary to create a symbol for its confidence in itself, in the stability of its power and in its destiny. But great architecture, let us remember, is the instinctive self-assertion of man against time and death. It is the offspring of inspired moments. The purpose of a great monument cannot, therefore, be too precisely defined. It is almost always something beyond what the planners themselves could have stated in words.

The Minār has Central Asian Turkish ancestry. There is a *minār* at

Jar Qurgan, near Tirmiz, built in AD 1108–9, which has the appearance of sixteen round columns tied together, and there is a strong resemblance between it and the second storey of the Qutub, which has a pattern of rounded flutes in section. The Minār-i-Kalan at Bukhara, built in AD 1127, has a round, arched clerestory at the top, supporting a cluster of arches, like three balconies of the Qutub. The minār at Ghazni consists in part of a polygon with deeply indented angles, a form of which the wedge-shaped flanges of the third storey of the Qutub could be considered a variation. An almost contemporary structure was the *minār* at Wabkent, built in AD 1196–7. All these *minārs* have a taper. But these were examples for the Muslim architects of the Qutub, Fazl-bin-abi'l-Maali, whose name is inscribed near the entrance, and Muhammad Amir Koh, under whom the Minār was completed in the reign of Iltutmish, as appears from an inscription on the side of the doorway of the third storey. One question of basic importance would have been decided the way the Hindu craftsmen wanted it to be. These craftsmen, in accordance with their inherited notions, would have insisted that to ensure stability, horizontal pressures should be entirely eliminated. The Minār has, therefore, a very pronounced taper. Its diameter is 46 ft. at the base and, as it now stands, 10 ft. at the top. As originally built, in four storeys, the top would have had a diameter of perhaps 12 to 15 ft. There are notations on the south face of the Minār plinth which Cunningham believes refer to an adjustment of about an inch in the plumb-line of the building. In this respect, the Hindu master-masons would have left nothing to chance. The minār at Jar Qurgan has a fairly high plinth, the Minār-i-Kalan of Bukhara, a very low one, and there would not have been discussion if the Hindu master-masons insisted that there should be no visible plinth. They were not used to the idea of the plinth as a distinct feature of a building. The rounded flutes and wedge-shaped flanges as we see them give the Minār an exquisite sculptural character, and it is my conjecture that this, too, is either entirely a contribution of the Hindu master-masons or their interpretation of the treatment of the facing shown in the plans or explained to them by word of mouth. The massing of inscriptional and ornamental bands and decorative mouldings below the balconies reminds us of the decorative treatment of temple walls, but the restraint shown in the spacing out of the other bands on the shafts of the three storeys of the Minār is something on which the Muslim architect would have insisted. The balconies, which form one of the most attractive features of the Minār are an essentially Muslim idea, and so are the clusters of miniature alcoves, or vaulted arches, which support

them. But in a network that looks like honeycombing and in the cusped tracery reminiscent of temple ceilings, there is evident an attempt to disguise architectural forms with sculptural effects. The result of the technical and aesthetic cooperation of the Muslim architects and Hindu master-masons is one of the most striking monuments of the world. But in form as well as meaning it is not what it was probably meant to be. The Turks wanted to create a symbol of power and stability; with its upward surge, expressed in the taper and in the almost organic emergence of one storey from another, the Qutub Minār is such a symbol. But the Hindu sculptor has also put his stamp on it. You can have power, he seems to have said, but I shall so suffuse it with beauty that those who see it will know that beauty is the only power that endures.

Political conditions following upon the death of Iltutmish and up to the time Alauddin had ensured security from foreign invasion and established law and order in his dominions were not such as to stimulate architectural ambitions. At least, there is nothing in the Qutub complex that can be traced to this period. Stone masons would have been employed in miscellaneous minor projects and by degrees lost touch with their sculptural traditions. Perhaps the need for employment forced them to accept the new styles, to learn the technique of building the true arch and to put trust in its strength. Some of them may have experimented in buildings that no longer exist, in various methods of assimilating sculpture and architecture. For the next monument that we see, the Alai Darwaza, is the work of practised hands and of minds thoroughly versed in the art of creating pleasing compositions of architecture and sculpture.

As originally planned, the Alai Darwaza consisted of a domed chamber with three entrances and a fourth archway leading into a portico, which was projected into the enclosure of the mosque. There were extensions also sideways, east and west, to combine the Darwaza with the enclosure wall in a harmonious fashion. The portico, which must have been built on the trabeate system, with a low roof, to be in keeping with the colonnade around the courtyard of the mosque, is no longer there, but the extensions still form visible parts of the existing structure. The architect of the Alai Darwaza was beyond doubt a Turk steeped in the Seljuq and earlier traditions of monumental architecture. He must have had the good sense to seek out the best stone mason sculptors and to consider how their skill could best be utilised before he gave a final shape to his plans. In this process he must have had consultations and discussions, and his plans must have been endorsed by his master-masons before they were submitted for final approval. The idea of three entrances into a chamber and an entrance into the mosque across a

portico would have been his, and it would have appealed to his master masons because of its resemblance to the structure of a temple. People would enter the mosque through what they thought was the gateway, but when leaving they would pass, like Hindu worshippers, from the *maṇḍapa*, or the vestibule, into the *vimān*, or shrine.

Structurally, the Alai Darwaza is a marvel of inspired simplicity. The arches of the three entrances are so exquisitely proportioned that they are equally beautiful whether seen from the outside or the inside, although the floor of the chamber is several feet above the ground level. The square of the chamber is converted almost imperceptibly into the circle of the dome, which rests on elegant squinches of a simple, sculptural pattern. From the outside, the dome is rather low. In fact, it is not a separate unit of the structure but the roofing of the vault, the height of which when seen from the inside is very impressive.

The plinth of the Alai Darwaza is indicated by means of a projection round the base, which could be used for sitting on, and of a cornice, but in a way, it has also been concealed in sculptural patterns, most of them of the traditional Indian style. This may be taken as an instance of the architect adapting a feature of temple architecture to suit his own purpose or as a contribution of the Hindu master-masons, who would have had considerably less opportunity to display their skill if the plinth had a straightforward architectural character. The superstructure of the Darwaza appears from the outside divided into two storeys, the distinctive features of the lower storey being ornate arches, small replicas of the main arch, two on each side of it, and of the upper storey rectangular panels formed by a judicious and pleasing juxtaposition of inscriptional bands of marble and red sandstone. The impression of height conveyed by the lofty entrance arch is toned down by the panels into a quiet dignity, and the eye could wander long and admiringly over the whole façade without any feeling of satiety or weariness. The three main entrance arches, with their white and red nookshafts, their intrados or inside surface alive with patterns of foliage in deep reliefs, their spearhead fringes and their marble frames have a beauty and a meaning all their own. If the central arch of the Quwwat-al-Islam mosque leads outwards into an uncharted world, the entrance arches of the Alai Darwaza lead inwards to a beauty distilled in lucid and harmonious detail, which holds the eye and mind in thrall.

And what of the two exactly similar arches, one of red sandstone and one of marble, on the fourth side, where one now enters the mosque enclosure, but which formerly led into the portico? These arches, with their delicately suggested trefoil, are something unique; they have no

ancestry and no offspring, Indian or foreign. They obviously bear the impress of the ivory-worker who has undertaken an adventure into the dimensions of architecture, or let himself be lured by a dream. But the social and religious aspect of these arches is even more significant. For, quietly and unobtrusively, they tell the Muslim worshipper that as he enters his mosque he is also passing beneath the shadow of a temple, under an archway that was created for him by devotees of beauty who could see all facets and all forms of truth.

The Alai Darwaza is the parting kiss of architecture and sculpture. They meet in fruitful union in Gujarat, but the next monument of significance in Delhi, Ghiyasuddin Tughlaq's tomb, is pure architecture disdainful of any sculptural devices and interpretations. Even in Gujarat, though the ascendancy of architecture does not appear in any chronological sequence, architecture has the last word in the Jami Masjid of Champaner. And so it is evident that, while in political and social life, in literature, music and dance the movement is towards unity, in architecture the tendency is in the opposite direction, the drapery and the aesthetics of sculpture being gradually discarded so as to achieve purely architectural expression. Akbar brought artisans together from all parts of India to build Fatehpur Sikri, but all that he could achieve was a harmonious assemblage of different styles. The sculptural beginnings of Indian Muslim architecture are an indication that we must revise our perspective. For while the written record of history shows the establishment of authority by force and bloodshed, we have in the architectural record unimpeachable evidence of understanding and cooperation, of joyful participation in creative work of the very highest quality. Should not this incline us to reconsider any views we may have formed of blind hostility between Muslims and Hindus in the first stages of the Turkish occupation of north India? War and destruction would have been inevitable in any case if ambitious men came from outside to displace the rulers of the country, but need we also assume that the people as a whole, Hindus as well as Muslims, were committed to this conflict, that there was no mutual appreciation and cooperation between the urban populations of north India, the Ghaznavi kingdom of the Punjab and lands beyond the Khyber Pass? Surely the actual builders of the Qutub complex must have known, if not admired, each other, for how else could they have achieved such perfect understanding? And if we assume that they knew and admired each other, we must exercise our imagination to correct impressions created by the rhetoric of the medieval historians and the political slogans of our own times.

SECTION II

Imperial Forms, Regional Structures



CHAPTER II.1

The 'Two-and-a-Half Day' Mosque*

MICHAEL W. MEISTER



Arab Muslims first invaded India in the eighth century, only to be driven back to strongholds in Sind where, for ten generations, they maintained an uneasy truce with the Hindu dynasties of western India. During that period Hindu art flourished, unaware or unreceptive of the art of Islam; and Islam itself only uneasily and for plunder looked toward the great temples of Hindu India.

Yet for a single generation after the Ghoris had finally established a foothold on the plains of Hindustan late in the twelfth century, Hindu and Muslim artistry mixed, before the flood of foreign blood could take the building of monuments out of the hands of local workmen (and of provincial dynasts) and turn Muslim architecture in India to reflect the styles and dynasties ruling elsewhere in the Islamic world.

This article wishes to introduce one mosque, the Aḍhāi-din-kā Jhoṁprā at Ajmer (Fig.1), built in the first grey edge of cultural contact, partly to redraw attention to so fine an example of Indian craftsmanship, and partly to open slightly the door to an evaluation of how and in what ways invading cultures interact.[1]

The Ajmer mosque is the second built by the Slave dynasty, following the Quwwatu'l-Islām mosque in Delhi. Both used the spoils of Hindu temples in the construction of their pillared halls; both added massive arched screens in front of the lower 'Hindu' halls behind. Yet what had

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seemed but an expedient in Delhi, shows calculation at Ajmer. Considerable non-Hindu (or 'neo-Hindu') material has been combined with plundered pillars to form the hall, and an organisation reflecting a calculated conception of space as an aesthetic medium has made itself apparent. The screen, more so than Delhi, shows, not only a mixing of motifs, but also an aesthetic balancing between the decorative styles of Hindu India and Islamic styles most probably of Afghanistan and Russian Turkistan.

Inscriptions give some sequence to the building of this mosque. On the central *miḥrāb* at the back of the hall is an inscription of AH 595, Jumādā II, AD 1199, April. On the back wall under the roof of the second dome from the centre to the north is an inscription of AH 596 Dhu'l Hijja, AD 1200, September/October, recording the name of Abū Bakr ibn Aḥmed Khālū (?) al-Hirawī as supervisor of construction. On the central arch of the screen an inscription assigns the construction to Iltutmish (r. AD 1210–36), and two inscriptions from the northern minaret also refer to Iltutmish of the Mamlūk dynasty, giving the usual titles for the Sultan. Behind the second arch from the south an inscription refers to the supervision of one Aḥmed ibn Muḥammad al-Ārid.[2]

That Muslims supervised construction throughout can be gathered from the above inscriptions. That Hindu workmen continued to work for the new Muslim rulers can be determined quickly from the material remains. Previous writers, enamoured of the plunder recorded by the Mamlūks in their building of the mosque in Delhi, have largely called the pillars of the great hall 'Hindu'.[3] They are 'Hindu', but they are not all plundered, a new order having been created by Hindu workmen for their iconoclastic rulers and combined with plundered pillars (images defaced), piled two on one, to give new height to form the hall.

This new order, the plain-shafted (square to octagonal) pillars (Fig. 2) which support the ornate Hindu pillars above, follow Hindu patterns in details; in the ornate pediment to the large diamond pattern, in the down-turned leaf pattern supporting the upper diamond-filled niches. Their starkness and form, however, are new, and not merely rough hewn. The tall foliate diamonds are themselves borrowed from Hindu architecture, but used here to fill niches meant, on truly Hindu pillars, for images of deities and sub-deities.

That such a new order was created and used in a consistent way to support, tone down, and lend sobriety to plundered Hindu pillars used above—a use consistent throughout the mosque—is in marked contrast to the disordered plunder in Delhi's Might-of-Islam mosque. That this

new order is combined with two layers of plundered pillars to give a height and airiness no Hindu interior had then achieved is a sign of the creative impulses stirring in the hearts both of the plunderers and of the plundered.

The lintels in the interior (Fig. 2) like the older pillars, show workmanship closely connected with that of the Cāhamāna dynasty defeated by the invading Muslims. So also the ceilings, yet in the ceilings especially there are details which indicate new work combined with old. The central lotuses in all three ceilings here illustrated (Fig. 3), while certainly made by Hindu workmen, are not used as they would have been in Hindu structures, but are substituted for the deep (and occasionally figured) pendants of the Hindu tradition.[4]

Even the great central ceiling (Fig. 3), so closely related to Hindu ceilings, and so much a creation of the Hindu tradition that none but Hindu workmen could have made it, still seems to this author, from certain of its details, a work commissioned from the Muslim overlords. No provision is made for the bracket figures required for any Hindu ceilings of this dimension. Instead, small lotuses figure where the upper sockets for the brackets would have been, and the lower bases are absent entirely. The excessive use of the tall-diamond motif between the two lower cusped courses of the ceiling (the band where bracket bases should have appeared, and where custom normally puts figured niches) are not consistent with pure Hindu tradition, but have some consistency with other material which, to the author, seems to have been made newly for the mosque.[5]

Of the great screen, of course, there is no doubt. Built for Iltutmish, its Kufic inscriptions and quotations from the Koran leave no doubt of its Islamic origin. Some of its decoration is related to that on the towers of Ghazni; and crisp and repetitive Kufic patterns particularly, refer to contemporaneous brick decoration in Islamic Turkistan.[6]

Many of the arabesque and filigree floral and foliate patterns, also, seem certainly out of Islamic pattern books, their geometric symmetry, drawn in fine and balanced lines against the dark background of shadow, remind one of later Persian tile-work. Yet not all the decorative work is made so, and though earlier Hindu floral work was marked by great plasticity,[7] it is the shadow filigree which marks this work aesthetically apart from the Hindu, and not its flatness. The right of centre band (Fig. 4), with is flat foliage accented by shadow rather than set against it, still closely reflects Hindu patterns at Nāgdā in the late tenth century, or the crisp, dry, but elegant patterning of the Kacchapaghāta Sās-Bahu temple at Gwalior dated AD 1093.[8]

The cusped arches of this screen (Fig. 1), while reminding us and perhaps the Muslim supervisors of certain Arab arches, must probably have reminded the Hindu carvers of the *torana* arches of their own tradition; and many of the punctuation bands and mouldings are taken directly from the temple wall. In Fig. 6, two important temple mouldings appear, used vertically rather than horizontally as on the temple, but clearly from the source. One is the *kalaśa*, or round moulding covered with *ratna* or diamond pattern (compare Figs 4d and 5a); the other the knife-edge moulding (*karṇikā*) used at the base of the medieval temple (Figs 4d and 5d). The dot-and-diamond, recess with sunk stepped-diamond, and the chain-of-buds motifs (Figs 4b, c and 3) are also commonly found in the Hindu temple's decorative repertoir[e].

To sum up, the Aḍhāi-din-kā-Jhomprā Mosque at Ajmer, built by the first Islamic dynasty to settle in India, and at the capital city of the strongest Hindu dynasty with which they had had to fight,[9] continued to employ Hindu workmen, who not only rendered new patterns provided by their Islamic patrons, but modified and transformed elements from the Hindu tradition.

If we can gain evidence from this example for a discussion of cultural interaction, our conclusions might be as follows: Material borrowed by the Islamic rulers from Hindu sources were several. First was material plundered and re-used; second, material borrowed and modified, as the ceilings at Ajmer. Other concepts were transferred, as the *torana* arch or the temple mouldings; both examples of a sort of empathetic response of local workmen, finding similes between elements in the local tradition and alien demands. Plunder, compromise, and simile modifying the dominant tradition; and finally, Hindu workmen themselves found stimulus from new requirements, bringing to fruition certain trends potential in their own tradition. One such is the tendency toward an etched, non-plastic, stencilled decoration; another, a desire for height and space, without heaviness, which Hindu temple *maṇḍapa*s had sought for but not fully realised.

A further conclusion might be that such blending occurs only where a culturally weak power conquers a culturally strong one. The 'Slave' kings did not carry much cultural baggage when they first built their dynasty, and the Cāhamānas they conquered at Ajmer had an active, developed and refined artistic tradition. But as the Delhi sultanate settled into power—even by the end of Iltutmish's reign—its lines of communication with Islamic cultures elsewhere strengthened and it turned away from its early flirtation with, and dependency on, its dependent people.

The 'Two-and-a-Half-day' Mosque thus was a short-lived phenomenon, unproductive, but the kinds of mixing rawly visible in its art, more subtly operate throughout the history of Islamic India. In one later instance—that of Gujarat in the fourteenth and fifteenth centuries—where conditions of an artistically weak conqueror ruling over a strong living tradition again occurred, and persisted, a major and successful mutation was produced.[10]

Notes and References

1. Dr Oleg Grabar first gave the author an opportunity to think over these questions by inviting a lecture on early Islamic architecture in India for his course at Harvard University.
2. Z.A. Desai, 'List of Published Muslim Inscriptions of Rajasthan', *The Researcher: A Bulletin of Rajasthan's Archaeology and Museums*, vol. x-xi, 1970–1, pp. 1–3. Also *Epigraphia Indo-Moslemica*, 1911–12, pp. 15, 29–30, 33.
3. For the Delhi mosque and inscriptions see J.A. Page, 'An Historical Memoir on the Qutb: Delhi', *Archaeological Survey of India, Memoir No. 22*, Calcutta 1926. James Tod called the mosque a Jain temple (*Annals and Antiquities of Rajasthan*, London 1827, vol. i, 1827, p. 779); James Fergusson, *History of Indian and Eastern Architecture*, London 1910, vol. ii, p. 211, comments: 'Like the remains at Old Delhi the entire plan is Moslim, whilst the columns and roofs are the spoils of Hindu temples.' Because important inscriptions of the Cāhamānas referring to a Sanskrit college were unearthed in the Ajmer mosque in AD 1875–6, many have written of the mosque as a converted Sanskrit college. For one version of this opinion see D.B. Har Bilas Sarda, *Ajmer: Historical and Descriptive* (Ajmer, 1941), chapter 7.
4. The side bands of lotuses in the ceilings also seem added. Some question should be raised of the possibility of 'restoration' in the nineteenth century also. The Archaeological Survey has at least, at that time, changed the conical outer shapes of the domes (see Fergusson, *History of Indian and Eastern Architecture*, n.1) to 'better hemispherical ones'.
5. My suspicions about these ceilings I have checked with Sri M.A. Dhaky, whose book, *The Ceilings in the Temples of Gujarat* (Baroda, 1963), is the most authoritative study of Hindu and of course Jain decorative ceilings.
6. For comparative material see Derek Hill and Oleg Grabar, *Islamic Architecture and Its Decoration* (London, 1964); Alessio Bombaci, 'Introduction to the Excavations at Ghazni', *East and West*, New Series, vol. 10, nos 1–2, March–June 1959; A.U. Pope, *A Survey of Persian Art* (London, 1939), plates.
7. The 'plasticity' of the vegetal patterns on the Delhi mosque screen leads Percy

Brown to see Hindu workmen behind it, while he finds that the Ajmer decoration 'has become rigid under the more strict application of the Koranic prohibition', *Indian Architecture: Islamic Period* (Bombay, 1943, p. 13).

8. Oleg Grabar's comment that 'the mosque at Ajmir shows the translation of Iranian architecture into Indian stone', in Hill and Grabar, *Islamic Architecture*, p. 72, while somewhat facile, is not inapt.
9. The Cāhamānas and the Mamlūks struggled over Ajmer for several years, with the Muslims or their feudatories conquering and losing the city more than once. The Muslims were at times allied with various factions of the Hindu rulers, and for some time placed one of the Cāhamāna families as feudatory at Ajmer. For their history, see Dasharatha Sharma, *Early Chauhan Dynasties* (Delhi, 1959).
10. M.A. Dhaky, 'The Minarets of the Hilāl Khan Qazi Mosque, Dholkā', in press, with the *Journal of the Asiatic Society*, Calcutta, discusses the formal interaction between Islamic and Indian forms in the minaret of one of the Gujarat mosques.

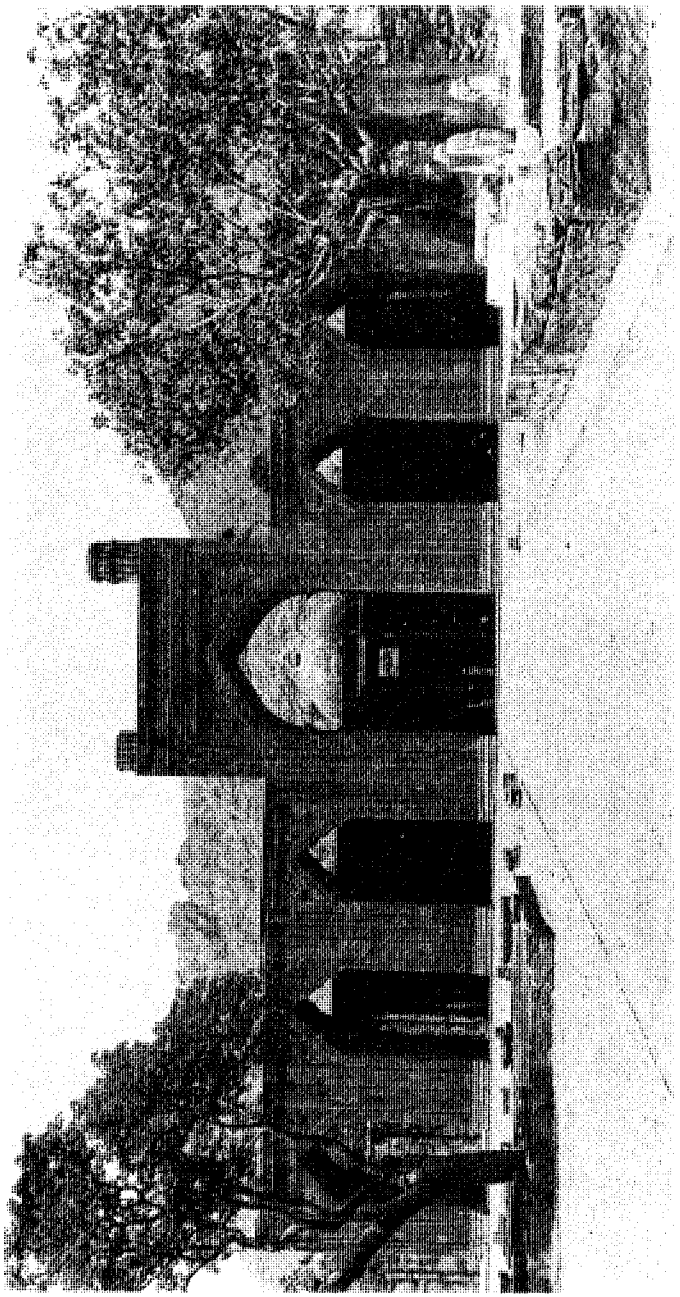


Fig. 1. Aḍhāi-din-ka Jhomprā, Ajmer, c. AD 1199-1225. Photo: M. Meister.

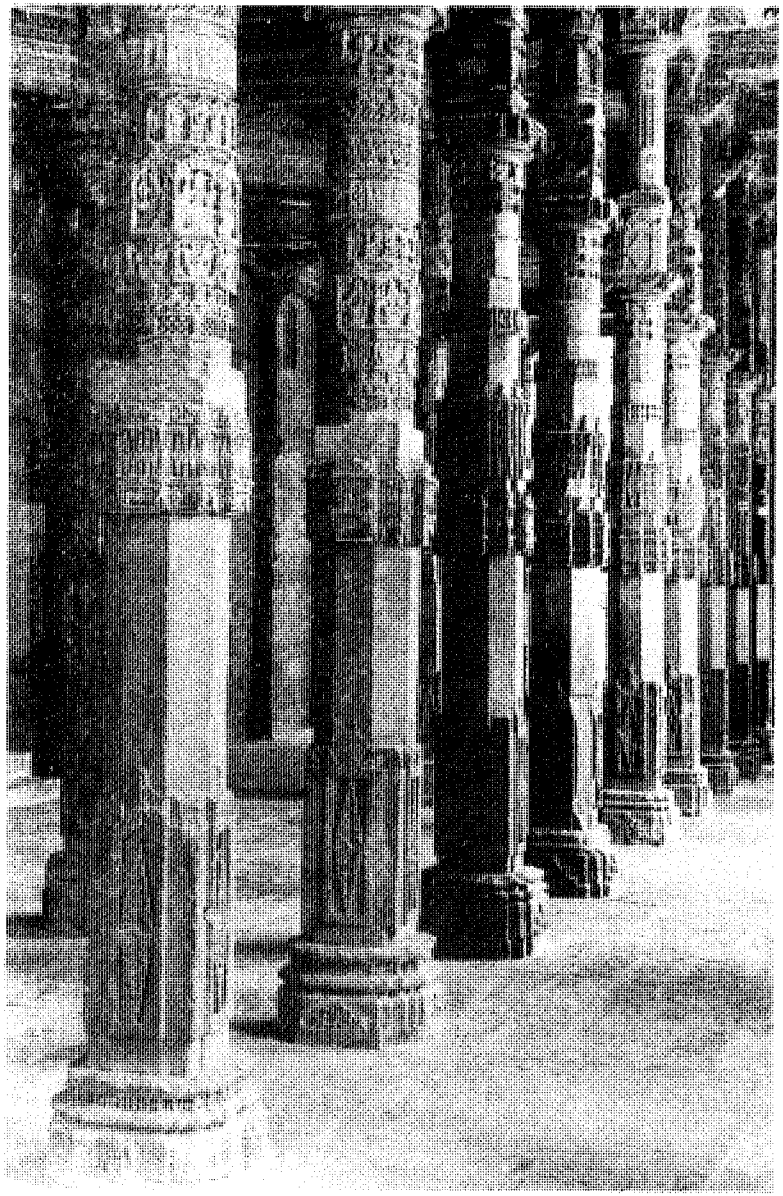


Fig. 2. Aḍhāi-din-ka Jhoṁpra, interior, pillars.
Photo: M. Meister.

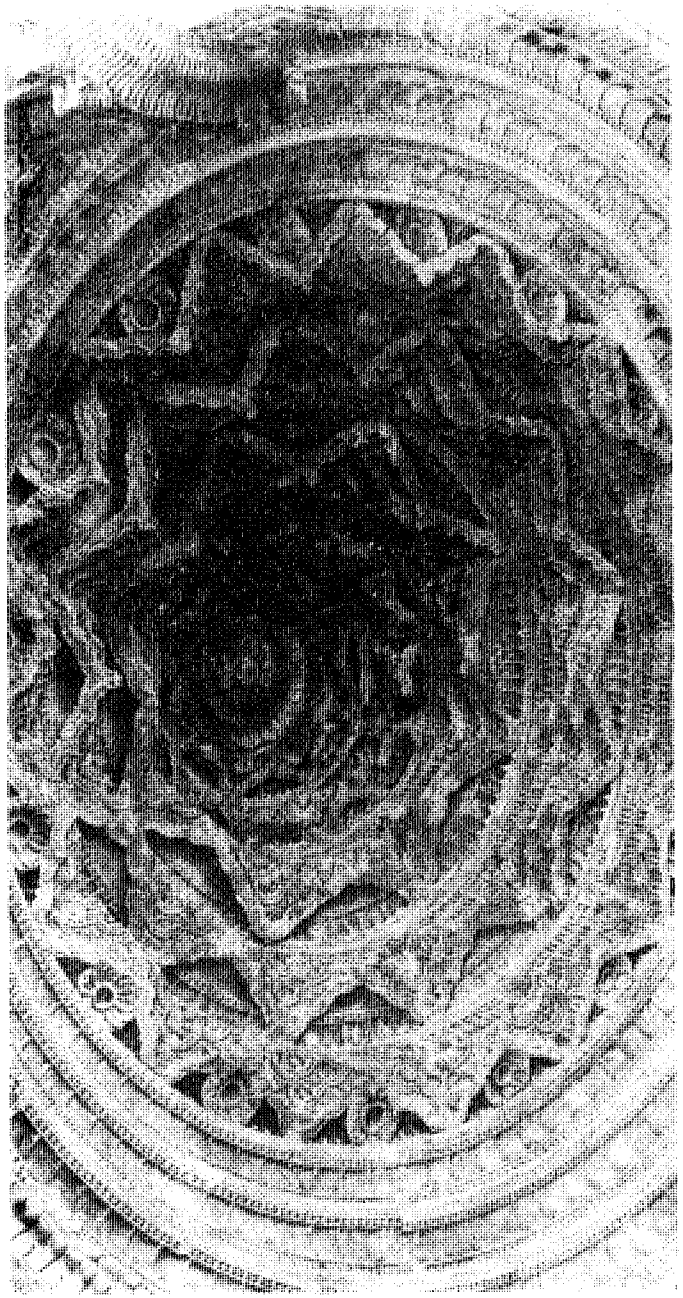


Fig. 3. Aḍhāi-din-ka Jhoṁpra, interior, great central ceiling. Photo: M. Meister.

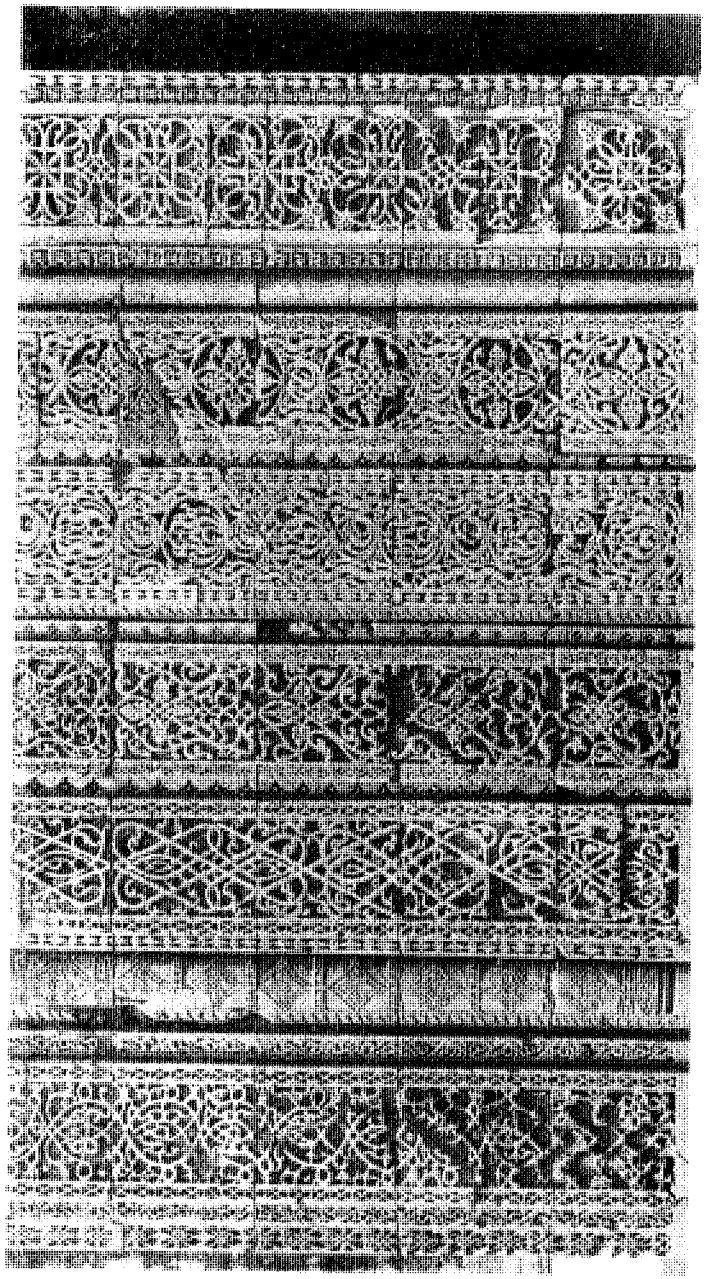


Fig. 4. Aḍhāi-din-ka Jhoṃpra, detail of screen. Photo: M. Meister.

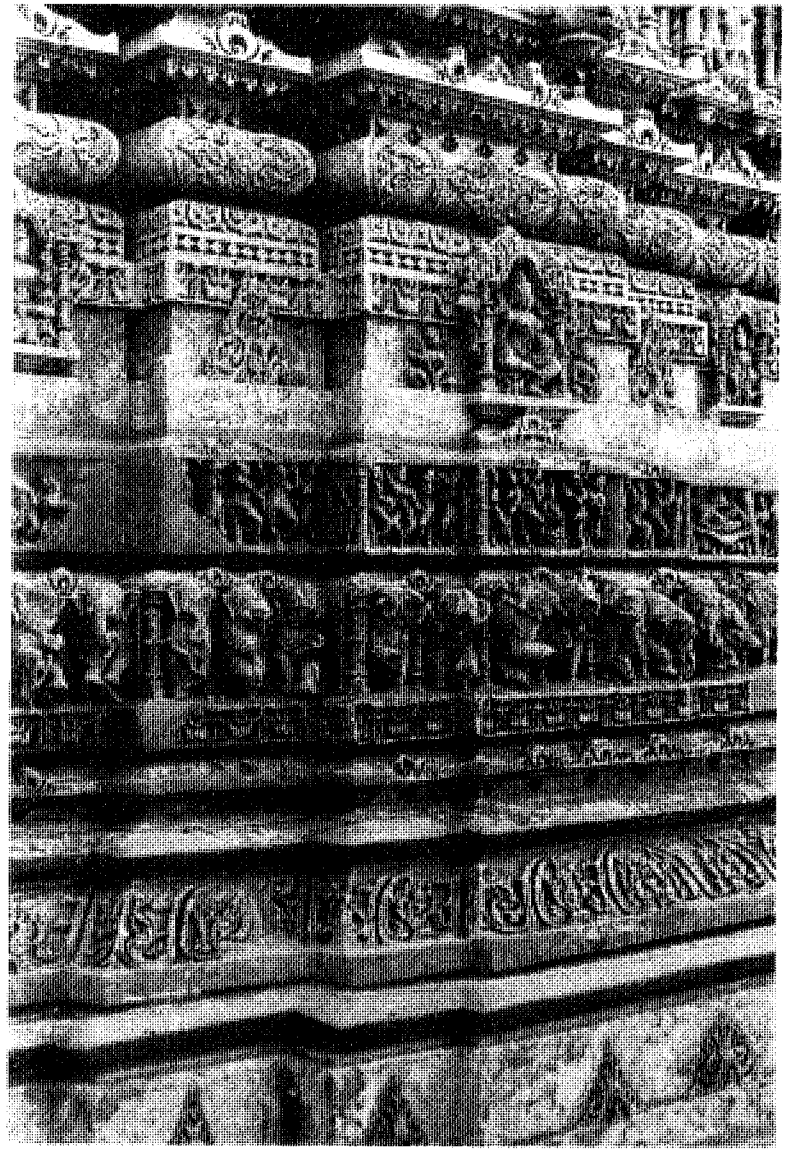


Fig. 5. Mahavir temple, Osiān, *c.* AD 1025, sub-shrine no. 3, detail of base.

Photo: M. Meister.

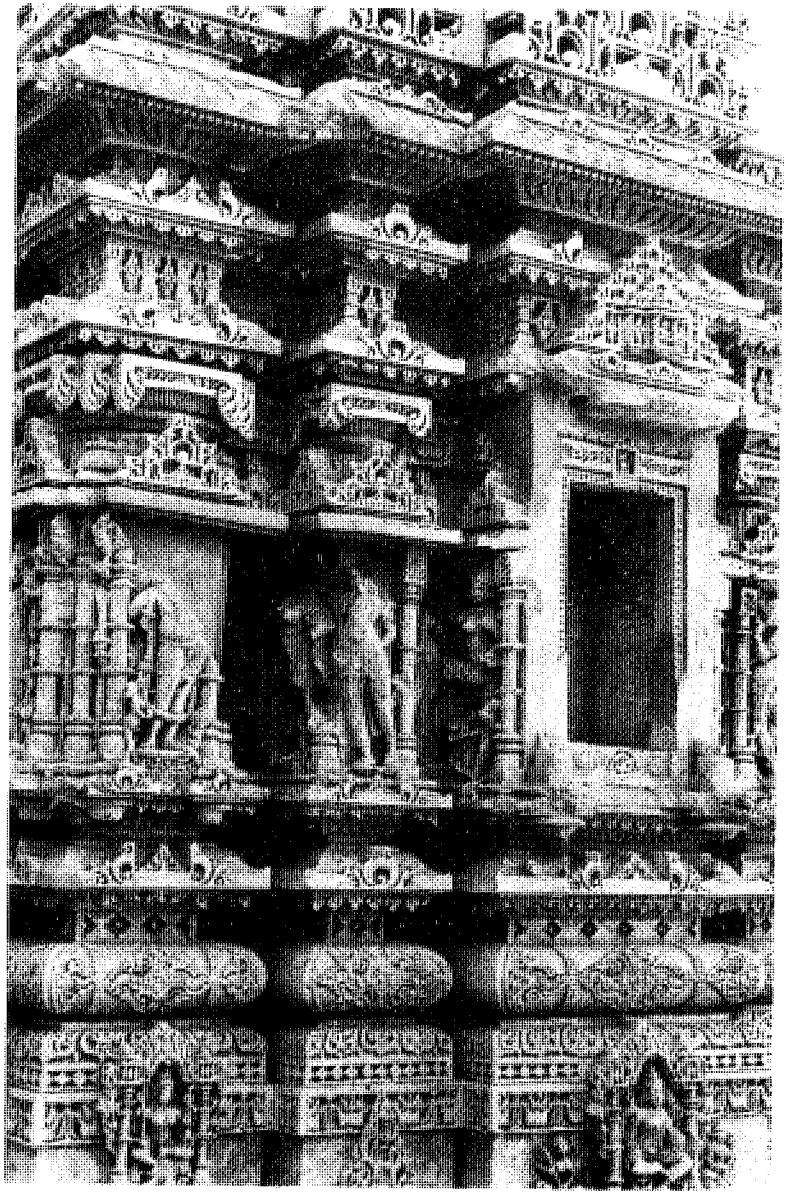


Fig. 6. Mahavir temple, sub-shrine no. 3, detail of wall.
Photo: M. Meister.

CHAPTER II.2

From Tamerlane to the Taj Mahal*

LISA GOLOMBEK



The Taj Mahal, crowning jewel of Mughal Indian architecture, built as a mausoleum for the wife of Shah Jahan around AD 1630, has paradoxically been considered the *chef d'oeuvre* of Persian architecture. Contemporary with the brilliant Masjid-i-Shah of Isfahan in the heartland of Iran itself, the Taj is nevertheless, in the opinion of many, aesthetically superior. If the highly visible Persian character of the Taj should be attributed to contemporary, that is Safavid, influence, it would be difficult to explain the difference. But Safavid architecture was not the source of the Taj. Its Persian character is derived from its model in India, the tomb of Humayun at Delhi, begun by his widow in AD 1573, which itself owes much to the Timurid architecture of the late fifteenth century. This relationship has been noted, but there has been little attempt to explain how Timurid influence came to India for the first time half a century after the Timurids had disappeared.

The tomb of Humayun and the Taj Mahal are variations on the theme of the imperial mausoleum in a garden setting.[1] Any discussion of these great imperial tombs must also consider this setting—a formal garden, surrounded by a wall and monumental gates, provided with channels of running water, fountains and pools, and planted with trees for shade and fruit, as well as flower beds. The garden walks are virtual avenues moving toward a goal, the royal tomb. In the centre of each garden the two main paths intersect, dividing the garden into quarters. In the earlier

*First published in Abbas Danesvari, ed., *Essays in Islamic Art and Architecture in Honour of Katharina Otto-Dorn* (Malibu, 1981), pp. 43–50.

example, the tomb of Humayun, the mausoleum is situated in the very centre. At Agra, the Taj pavilion comes at the conclusion of the four-fold plan with the garden 'at its feet'. All of the major concepts embodied in the later and more famous mausoleum, the Taj Mahal, are already present in the tomb of Humayun—the garden setting, the gateways, the formal and geometric character of the garden, and the internal organisation of the pavilion. To understand this last point, which is critical here, one must look at the floor plans.[2]

The space under the great dome of the Humayun mausoleum is occupied by an octagonal room containing the tomb. On the cardinal axes of the octagon lie the four great barrel vaults or *eyvans*, opening onto the garden, except on the south, where the space is closed to form a room. Between these axial spaces, occupying the corners of the square, are four apartments, octagons or squares with chamfered sides, i.e., false octagons. These rooms are all connected to the central hall by corridors. If the lines of the corridors were extended, they would cross at the very centre of the central octagon. These radial corridors are cut perpendicularly by wider corridors which connect the three *eyvans* and south octagonal room. If we extend these lines, they form a square, circumscribing the central hall. The interior space appears to be organised on the basis of a geometric figure. The ground plan of the Taj Mahal is similar.

In order to demonstrate that the dominant influence in these Mughal garden tombs was Timurid, we must first rule out other possible contributors, namely, the indigenous architecture of India, non-Muslim[3] and Muslim. The traditional architecture of India was essentially trabeate. It utilised the post-and-lintel system of construction. This system demanded a ready supply of stone and timber. The ideas which the Muslims brought with them to India, beginning in the late twelfth century, had been developed in Iran where access to stone and timber was limited. Because of these limitations, Iran perfected an arcuate system, characterised by arches, vaults, and domes, built of the readily available material, brick, and set with an excellent mortar. The Persian mosque was typically a domed building complemented by vaulted arcades around a courtyard.[4] With some hesitation at first, the Indian masons responded to the demands of the early Muslim rulers of India, adapting local material to new aesthetics. The sultans at Delhi, from the early thirteenth century on, showed themselves to be staunch patrons of architecture, and their many mosques and shrines are closely related to the

Seljuq style of Iran and Anatolia. Nothing produced by them in the plains of India, however, anticipated the unique garden-tombs of the Mughals.

A second Islamic milieu was established on the Deccan plateau to the south from AD 1318 on. By the middle of the fourteenth century the Deccan nobles founded their own dynasties, which survived the Mughal conquest until well into the seventeenth century. They seem to have retained particularly strong ties with the Iranian world. Although they borrowed freely from Persian architecture, during the second half of the fifteenth century their impact on the Mughals seems to have been limited. I shall return to this point later on.

Two of the main features which we find in Mughal tombs are characteristic of Timurid architecture.[5] Monumentality, regardless of scale, and rationalism, manifest in a highly developed sense of proportions, appear already in the first major work commissioned by Timur, the shrine of Ahmad Yasavi at Turkestan (AD 1391–9). Timur's own tomb, the Gur Amir at Samarqand (AD 1405), shares with the Taj Mahal a sense of majesty, although the earlier mausoleum is relatively small. In its original state it, too, could be seen rising between the minarets that stood in the corners of the courtyard into which it had been set. Its double dome, the outer shell resting on a high cylindrical drum, no doubt inspired the double domes of Mughal tomb architecture.

Monumentality was achieved in a very concrete sense in the great Friday Mosque of Timur (AD 1398–1404) at Samarqand, the 'Bibi Khanom', and the palace at Shahrisabz (AD 1379–96). The colossal ruins of these buildings are still some of the most impressive sights in Asia.

Extraordinary scale was not new to the imperial architecture of the Islamic east. The Seljuqs and Mongols built colossal mausoleums. But never before did rationalism so dominate the planning and execution of a work of architecture. The monument which best reflects both the monumentality and rationalism of Timurid architecture is the shrine at Turkestan.

The shrine is a multi-chambered complex, with service rooms arranged around a central hall, and with the tomb chamber of the saint at the rear. The shrine is entered through a monumental *eyvan* in a grand façade flanked by towers. The essential measurements of the building, the length of the rectangle, the width of the *eyvan*, the proportions of the mausoleum, and the height of the dome are all calculated on the basis of the diameter of the central room, the one dimension which Timur himself is said to have dictated. The location of individual rooms, alcoves,

and doorways was determined by a system of triangulation based on the centre of the large domed hall.

The proportions of the rectangular halls around the central square were chosen to permit the construction of stellated designs in the vaults above. This feature reflects not only a new aesthetic, but also the availability of a new technology. Square rooms could easily be covered by domes, but rectangular spaces had generally demanded barrel vaults, which tended to look heavy and reduce lighting. The alternative, the squinch vault, in which corners were built up as squinches to reduce the central area to a square or more manageable rectangle, were not much more artful. The shrine at Turkestan is the first building in Central Asia to incorporate an improved technique that had been developed in Iran during the mid-fourteenth century. The architects of the shrine came from Shiraz.

Rectangular spaces in the shrine were broken up by transverse arches, and the reduced areas between the arches were then covered by a series of vaults.[6] These vaults rested only on the transverse arches and short arches recumbent on them. By the 1360s such vaults had become tripartite. In the fifteenth century, the central section formed the nucleus of elaborate ribbed stellate vaults of brick and plaster. The section could also be covered by a lantern vault.

The perfection of the transverse vault was the key to all of the major innovations of Timurid architecture. It made architects realise that a vault could rest directly on four arches, and that the arches themselves need not spring from their own piers. They could abut other arches if the two could somehow intersect.

The next step was taken by the famous architect of Shah Rukh, Qavam al-Din of Shiraz, in the Ghiyathiyya Madrasa at Khargird.[7] Begun around AD 1438, its plan shows an astonishing homage to geometry. It is as if one quarter of the design were drawn and then the paper folded to reproduce the drawing identically in all four quarters, without any consideration for functional differentiation. Behind the entrance façade are the two main public halls, the lecture hall on the left, and the mosque on the right. Although identical in plan, they are totally different in elevation.

Despite their differences, which have often been remarked, both utilise the new technology. The vault in the mosque rests on the four wall arches and the recumbent arches which cross over the corners. In the past, domes were made to rest on an octagonal zone of transition set above four walls. The corners of the square were bridged by an arch,

or squinch. Above this often occurred a sixteen-sided zone, and then, finally, the circle of the dome. The squinch system demanded strong, sometimes massive, walls, which gave the interior of the room a ponderous feeling. This, in fact, was the system applied by the Muslim architects in India until the end of the fifteenth century. These walls could be opened up to some extent by arched niches, but the breadth and depth of these openings were limited by the need to use the walls as recipients of the thrust of the dome. Transforming the walls virtually into arcades, the Timurid architect could thus enlarge the floor space while, at the same time, reducing the actual size of the dome, both highly desirable objectives.

The new system, as seen at Khargird, permitted the architect to open up the walls because the weight of the dome was now carried on arches. The experiment with composite vaults had proven that short arches, bridging the corners like squinches, could support a significant share of the weight if they sat on the haunches of the large arches. A corbelled transition zone beginning above the arches leads to an octagonal drum which is, in fact, a lantern. The actual dome is merely a cap placed on top of this tower.

Even more daring was the vault introduced in the chamber left of the entrance at Khargird. Here, the arches were erected just inside the square of the hall, forcing them to intersect or dovetail in front of the corners. The whole vertical assembly was brought inward toward the centre as it moved upward. The actual construction is masked by plaster ribs which create the impression that they support the dome. At the same time they form an interesting star-pattern. The *muqarnas* (stalactite) compositions appear to serve as brackets, but in fact they merely help the eye move from one surface to the next.

Out of these developments three features emerge: the first is the formation of 'kite-shaped' squinches below the corner recumbent arches, sometimes referred to as 'triangular pendentives'.[8] From this form developed the net of intersecting arches, known as the arch-net (or squinch-net), which became a hallmark of the fifteenth century. The second is the formulation of a new type of ground plan, appearing cruciform because of the deep alcoves in the side of the square. Unless very provincial, most Timurid buildings from this moment on show arched niches or alcoves in their plan. The third feature is the obvious interest in geometry. We see this not only in the ground plan at Khargird but also in the ribs of the dome chambers, which form a star-pattern of purely decorative value.

Some of these ideas which Iranian architects had brought to the Timurid cities of Central Asia and Khurasan did find their way to the Deccan before the Mughal period. The *madrasa* of Mahmud Gavan built at Bidar in AD 1472 is almost a carbon copy of the Timurid one at Khargird.[9] Disdaining the natural beauty of stone, the patron, who came from Gilan, preferred to embellish the façade of the *madrasa* with the mosaic faience of Timurid Iran.

Although the four-*eyvan madrasa* plan was never repeated in India, popular though it was in Iran, many of the other Timurid ideas were found acceptable. A mausoleum near the Chawkandi at Bidar shows an understanding of the system of intersecting arches and the prismatic arch-net that Timurid architects gave to Iran.[10] Although there is no secure evidence for the participation of Iranian architects in these projects it is hard to imagine how such ideas could have come by another route. This art of the Deccan does not, however, show the sophistication of Timurid planning, except for the anomalous *madrasa*, and provides no basis for suggesting that it was the direct source of Mughal architecture.

In Iran the invention of a new system of vaulting and the insistence on geometric proportions led to the creation of new types of spatial organisation. One of the plans which emerged is directly relevant to our study. The system of design generated a square or rectangular building with a large central hall covered by a dome.[11] The central hall did not, however, fill up the whole square or rectangle. There is always a small room tucked into each corner, and an *eyvan* or room lying between these corner spaces. The floor plan was therefore divided into nine parts: the central hall, surrounded by eight units. The reasoning behind this plan is quite simple to understand, if one considers the vaulting in the central hall. The dome is supported on arches rather than walls. For this support system, the architect needed massive piers from which to construct the arches, and supplementary buttresses to keep them from bowing out under the weight of the dome. He therefore added buttressing units in front of the crowns of the arches in the form of *eyvans*, that is, barrel vaults. To the viewer they pass as elegant entrance halls. The corner rooms mask the bulky piers needed to support these arches and give additional buttressing to the piers. At the same time the building acquires a series of apartments that can be used for a variety of purposes.

The desire to open up the interior and to avoid bulky walls and piers led the architects to other novel features. They were able to give the arches additional support by cross-bracing them, not with tie-beams, but with galleries.[12] These galleries became delightful loggias from which

the events of the central hall could be witnessed. Sometimes these galleries opened to the exterior as well.[13]

Like the *madrasa* at Khargird, these nine-part structures became subject to intense geometrisation. In many ways they were even more suitable because the whole building could be laid out around the circle of the central dome.

It is fairly certain that such buildings were never built from the outside in. They were generated upon permutations of the circle, square, hexagon, and pentagon.[14] As in the shrine at Turkestan[14], the diameter of the dome determined the size of all the other elements and their placement in the building. The depth of an alcove in a square room might be found by rotating an identical square 45 degrees. The points at which this square intersected with the original one determined the breadth of the alcove. By extending the lines of both squares, a star-like form evolved that would fix the outer perimeter of the building or the centre of a corner room. The geometric figures which determined the proportions of these radially planned monuments were often reflected in their decorative plaster star-vaults.

Variations on the geometric theme were infinite, and no two buildings were ever planned alike. These architectural plans were produced in much the same way as Islamic geometric ornament.[15]

Among the surviving examples of nine-part structures are *khanaqah*s and funerary monuments, but literary sources speak of nine-part buildings serving as garden pavilions. Many descriptions of Timurid gardens have been preserved, but neither their pavilions nor their settings have remained or been identified. The Timurid garden belongs to a long historic tradition which merges the two concepts of the Islamic notion of Paradise as a garden, and the ancient Persian idea of the royal garden, for which archaeology bears testimony going back to the Achaemenids.[16]

By the fifteenth century gardens had become quite formalised. They are described in texts, both in the Khurasanian realms of Timur and in the lands of the Turkomen in western and central Iran of the late fifteenth century.[17] It was in these gardens which encircled the great cities of Samarqand, Herat, Bukhara, Tabriz, Yazd, and Isfahan that the princes received guests and spent their leisure hours. These gardens were laid out formally, with courses of running water, with pools at the intersections of the courses, with fruit and shade trees, herbs, vegetables, and flowers. Most gardens contained buildings, some for temporary visits, others for more permanent residence. The most common type of feature was an elaborate gateway, which itself contained running water and

other facilities. Within the garden stood one or more pavilions, designed for intimate gatherings, having painted ceilings, stalactite domes, indoor reflecting pools, and rooms ventilated by wind-towers.

Of particular interest are the pavilions referred to as 'Hasht Behisht', the 'Eight Paradises'. To judge from descriptions of such palaces of Tabriz and Herat, the number 'eight' alludes to the eight rooms or apartments surrounding a large central hall. In other words, these pavilions were nine-part plans. The central dome-chamber, perhaps counted as the sun or divine source, was excluded to conform to the eschatological concept of the 'Eight Paradises'.

The most famous description of such a palace is the legacy of an Italian merchant who visited Tabriz in AD 1507.[18] He described the 'Hasht Behisht' Palace of Uzun Hasan, built in AD 1486, as having four corner rooms and four antechambers before the entrance. It had a dome and upper rooms. A similar pavilion of nine parts, or eight leaving out the central hall, was visited by Babur himself in the Bagh-i Safid of Herat.[19] The palace of Dawlatabad at Samarqand has also been interpreted as a 'Hasht Behisht' plan.

These literary descriptions define a building type which corresponds perfectly with the plans known from surviving Timurid *khanaqah*s and mausoleums. In the Timurid buildings it is not clear at what point the design component became firmly associated with the allegorical. As the structural needs became more apparent and were resolved with greater and greater finesse, the resulting configuration acquired metaphorical meaning. This identification of a spatial plan with a specific iconography persisted in later Islamic architecture and is nowhere more evident than in the garden pavilions of the Safavids. The seventeenth century 'Hasht Behisht' in Isfahan delighted many visitors from Europe.[20] In essence, then, the spatial organisation of the tomb of Humayun and the Taj is a 'Hasht Behisht' plan, an idea which developed in Timurid Iran.

Let us now consider the garden. Insofar as texts describing palatial gardens of the fifteenth century indicate, gardens were dominated by a main canal of water, fed from a stream flowing down the centre of the garden into a pool near a pavilion. The banks of the stream were planted with trees, and the other plants were arranged around the pavilion or laid out in beds in sets of four. There is some confusion as to whether these quadripartite beds constitute the '*chahar-bagh*' or 'Four Gardens' that are occasionally mentioned in texts, or a whole garden divided into four parts like that of Humayun's tomb, the 'quartered' garden.

I have found no evidence to indicate that the quartering layout predominated in Iran before the sixteenth century. A description of how to lay out a *chahar-bagh*, written in Herat in AD 1515, does not even mention such a plan.[21] The source of this plan should not be sought in Iran of the Timurids. The same may be said of the formal garden as a setting for a tomb. In Timurid Iran tombs were situated within large enclosures, but these were always informally planted and were primarily cemeteries, containing the tombs of devotees of the shrine. Thus, the four-part garden as a setting for a tomb may be something that Mughal India exported back to Safavid Iran.

Let us consider now how the 'Hasht Behisht' idea actually came to Mughal India. Although neither Babur, the founder of the dynasty, nor his son Humayun, for whom the mausoleum at Delhi was built, were patrons of the buildings in question, their experience in Iran and Timurid Central Asia no doubt had an impact on them which was transmitted to their heirs.

Babur, a descendant of Timur, was brought up in a Persian milieu in Central Asia. Humayun took up exile at the court of the Persian monarch Shah Tahmasp in AD 1544 before returning to the throne of India. Babur took particular notice of the palatial gardens in gardens in Herat where he was lavishly entertained. These examples no doubt inspired the gardens which he built in Kabul. Unfortunately, we do not have any idea of what its architecture looked like.

For Humayun we have a remarkable description of two palaces which he built.[22] One was an enchanted house, with a trick pool that contained subterranean passageways to other parts of the building. Another was a floating palace. It consisted of four barges on which were constructed a four-arch unit (a *chahar-taq*) in two storeys. These were joined together in such a way that the four *chahar-taq* units faced each other, and thus between each two of the four barges another vault was produced. Consequently, between the barges an octagonal space appeared.

Thus, on the water Humayun simulated the nine-part pavilion, a 'Hasht Behisht', leaving the centre octagon void, rather than covering it with a dome as in actual buildings. The four barges were in fact the corner rooms of the composition, and the so-called 'vaults' between them were the axial *eyvan*s of the familiar plan. It is precisely in this format, with the octagonal central hall, that Humayun's tomb was ultimately conceived.

A poem following the description of the floating palace leaves little

doubt that Humayun was consciously recreating the 'Hasht Behisht' type of garden pavilion: 'And by the union of the *Char Taq* (units), eight heavens (that is, Hasht Behisht) have appeared there. A reservoir like the *Kawthar* (the Pool of Paradise) has appeared between them.' And just to complete the picture Humayun planted several barges with fruit trees, flowering plants and vegetables. It must have been an extraordinary sight in AD 1530 to see this pavilion and its garden gliding down the Jumna river from Delhi to Agra.

We may conclude therefore that the early Mughal rulers not only knew about the Persian garden palaces but did them one better.

In the case of the tomb of Humayun, the patron's wishes are strongly reflected, but there remains the possibility that the architect himself may have been responsible for the foreign elements in the building. It is always difficult in the study of Islamic architecture to weigh the respective contributions of patron and architect because in most cases the patron conceived the building. The information available on the architect of the Mughal tomb suggests that his role may have been more dominant.

The architect is known from two texts, Bada'oni,[23] who gives only the name Mirak Sayyid Ghiyath, and Baha'al-Din Bukhari, who provides some more tantalising information.[24] In addition to naming Mirak as the architect of the tomb of Humayun in Delhi, he adds that Mirak Sayyid Ghiyath was employed in the court of the Shaybanids of Bukhara, who had displaced the Timurids. For Muhammad Shah he had built a garden south of the city. Just before the mention of this garden the author also speaks of the construction of the Mir-i Arab Madrasa in Bukhara, although it is not clear whether the same architect was responsible for that building too. The fact that Mirak Sayyid Ghiyath was noted as a landscape architect may help explain why the garden at the tomb of Humayun is so prominent. It may also explain some of the peculiarities of the garden, the quadripartite form. Perhaps this represents a post-Timurid development of the Persian garden.

As for the pavilion, we may do well to look for similar buildings in the Bukhara region. Although an identical model has not yet been found, many of the ingredients are present in other Shaybanid buildings. For example, the *madrasa* named in the text, the Mir-i Arab, shows an even greater tendency to geometrise the plan than did the Timurid *madrasa* at Khargird.[25] Its corner passageways have become diagonal lines as if the scheme used to determine the proportions of the building had itself left an impression. The same use of diagonal passageways occurs in the

tomb of Humayun. The plan of the Qasim Shaykh Khanaqah in Kermin, dated AD 1558–9, comes very close to that of Humayun's tomb and precedes it by only five years.

The Timurid ideas which can be identified in the tomb of Humayun and its successor the Taj Mahal were formulated by both patron and architect, but the remarkable point is that such ideas were a generation removed from their source. The builder of the tomb was Humayun's widow, whose concept of a proper imperial tomb was based on memories of earlier buildings either seen by herself in Iran during Humayun's exile, or reported to her second-hand through his re-creations of such buildings as the 'Floating palace' described above. The architect was also heir to this tradition but by a completely different route. The arts of Bukhara in the sixteenth century, both painting and architecture, perpetuated the canons established in the late fifteenth century, merely refining and extending them to their logical conclusions. Only a Bukharan architect of the sixteenth century could have built a 'Timurid' mausoleum for the Mughals.

The process by which Timurid ideas were transformed in India is an important and complex chapter in the history of cultural borrowing, to which the Mughal tombs may add a footnote. Certain images which were treated figuratively in Iran seem to have been rendered concrete by the Mughals. The cemetery in Islamic tradition is often referred to as a *rawda*, a garden, an image which alluded to the paradise gardens of the Hereafter. In the Timurid realms shrines tended to attract large cemeteries which could be enclosed, but these were never formal gardens, as found in residential establishments. At the tomb of Humayun this theme is given its first literal interpretation. The cemetery is a garden. Thinking in this concrete way, the builder of the tomb no doubt relished the idea that the nine-part plan of the pavilion would reflect the composition of the Heavens itself. Although the plan had already acquired metaphorical meaning in Iran, this sense was made far more explicit in the tombs of Mughal India. To return to our original paradox, that the Taj appears to be the epitome of Persian architecture, this is because it is retrospective. The architects understood Timurid architecture better than their predecessors who were caught up in the process of creating it. The Taj captures the distilled essence of the Timurid spirit. Extraneous detail is laid aside. There was no need to obscure the spirit with experiments which would have led to new developments.

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CHAPTER II.3

The Baluster Column—A European Motif in Mughal Architecture and Its Meaning*

EBBA KOCH



In the second quarter of the seventeenth century a new architectural motif appears in the palace architecture of the Mughal emperor Shah Jahan (r. 1628–58). This new element in an already extensive vocabulary of Mughal architectural forms is the baluster column.[1] It rapidly came to be one of the most widely employed motifs of Indian architecture: it was the predominant columnar form of north and central India in the eighteenth and nineteenth centuries.[2] The present investigation of its origins will attempt an explanation for its particular popularity in later Indian architecture. Apart from general statements about architecture as the embodiment of the ruler's intentions, the historians of Shah Jahan's time are silent concerning the ideas which guided patrons and architects. The form itself constitutes our main evidence.

The earliest extant examples of the Mughal baluster column are found solely in Shah Jahan's contributions to the three great fortress-palaces of the Mughal emperors: Agra,[3] Lahore[4] (both founded by Akbar in about AD 1565 and modified under Shah Jahan from AD 1628 onwards) and Delhi[5] (newly constructed by Shah Jahan between

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AD 1638 and 1648).[6] Among these the columns of the baldachin of Machchhi Bhawan (before AD 1636)[7] (Figs 1 and 3) and the loggia in the so-called Zenana Mina Bazar,[8] both in Agra Fort, seem to be the first functional columns with a baluster shape in Mughal architecture. Those of the loggia in the Zenana Mina Bazar, especially, already show all the characteristics of the Mughal baluster column.

This is a column composed of four parts: base, a pot-like element, shaft, and capital. The different elements are separated by protruding rings and an additional concave contraction at the joint between the pot-like element and the shaft which forms its bulb.[9] It is always at the bottom and grows out of a foliage wreath of acanthus leaves. Similar leaves form the capital. Under the neck of the column is often carved another wreath of small leaves. The pot-like element is also decorated with acanthus and fluted or moulded in the same way as the shaft. It was conceived as part of the shaft and forms a unit with the column. The base is the least standardised element. It often appears as an inverted capital of acanthus leaves. Later variations on these typical features consist mainly in changed proportions and in stylisation or alteration of the foliate decoration—lanceolate leaves reminiscent of lotus petals instead of acanthus, for example (Fig. 2). The pot-like element is occasionally omitted.

One of the most striking characteristics of these early columns is their widespread use. The baluster column as a functional architectural element supporting an engrailed or semi-circular arch is used in three of Shah Jahan's palace buildings in the Red Fort of Agra: the throne baldachin already mentioned in the south wing of Machchhi Bhawan, the loggia in the Zenana Mina Bazar, and the loggia next to the Nagina Masjid[10] both datable about the same time.[11] Later, its use is more frequent in the Red Fort of Delhi: the throne *jharoka*[12] in the Daulat Khana-i Khass o'Amm (now called Diwan-i'Amm, Hall of Private and Public Audiences); the hall of Shah Burj;[13] the pavilions Bhadon (Fig. 2) and Sawan in the Hayat Bakhsh Garden, the tripartite arched central window of the river side of the Daulat Khana-i Khass or Diwan-i Khass (Hall of Private Audience); in the arcaded filling of the arches above the in-and-out flux of the channel Nahr-i Behisht in the Imtyaz or Rang Mahal.[14] There are no free-standing baluster columns of Shah Jahan's reign preserved in the Fort of Lahore.

The baluster column also appears as a decorative architectural element in a number of structures: the balustrade which ran around the courtyard of Anguri Bagh (before AD 1637);[15] in a similar form in the

balustraded window in the north-eastern hall of Jahangiri Mahal, altered under Shah Jahan before AD 1637 (both Agra Fort); as an engaged colonnette in the frame of the central part of the prayer hall of the Moti Masjid in the Fort of Lahore;[16] (Fig. 5) and free-standing in the form of a candelabrum as *guldasta* (ornamental pinnacle) on the roof of the Nagina Masjid in Agra Fort.[17] On the inner dado of the loggia-like *jharoka* of the Diwan-i 'Amm (completed in Agra before AD 1637) the baluster appears as an ornamental wall relief (Fig. 7). It has a corresponding use at the base of the throne *jharoka* in the Diwan-i 'Amm in Delhi.

This foliate baluster column with a naturalistic acanthus-leaf capital, used as a functional architectural member, has no real precedent in Indo-Islamic architecture.[18] A certain predisposition towards 'constricted' pillars with an inserted round or faceted element between the constrictions can however be seen in engaged corner colonnettes throughout Indo-Islamic architecture[19] and in free-standing pillars, especially during the reigns of Akbar (AD 1556–1605) and Jahangir (AD 1605–27).[20]

It seems quite possible that this combination of a column with an inserted pot-like element near the base prepared the ground for the acceptance of the related form of the baluster column. This pot-like element faceted in a round shape at its bottom and concave in its upper part is in itself reminiscent of a miniature baluster.[21] The interchangeability of these forms is demonstrated in the baluster colonnettes which replace the lower part of the two engaged corner pillars framing the central wall projection of the Moti Masjid in the Fort of Lahore, where one would have expected the engaged colonnettes with the round element hitherto used in this context in Indo-Islamic architecture (Fig. 5).

Whereas these earlier pillars consist of different parts merely added one to another, the baluster column of Shah Jahan's time represents an organic vegetal interpretation of a column. It grows—clothed in foliage—out of the pot-like element, swells, decreases towards the neck and opens in the calyx of the leaf capital. The curvilinear profile of the shaft underlines the dynamic qualities of the concept. This is a particular instance of a general development which can be observed in Shah Jahan's architecture. Architectural forms that were previously composed on additive, two-dimensional principles are now related to each other by a self-generated dynamism which explores the third dimension. Indo-Islamic architecture shows an inclination towards constricted and composed columnar forms. Closer prototypes for the Mughal baluster column are found, however, in eastern India, where balusters and baluster columns occur in Buddhist and Hindu architecture and sculpture.[22]

Most of the ancient Buddhist architecture in Bengal and Bihar was destroyed in the wake of the Muslim invasions from the end of the twelfth century onwards. Yet miniature buildings such as votive stupas or temples are preserved which show niches containing images flanked by baluster columns supporting trefoil arches.[23] Medieval eastern Hindu architecture is mainly represented by the temples of Orissa which escaped destruction because Orissa was conquered by the Sultans of Bengal only in AD 1568, at a less iconoclastic period.[24] In AD 1592 it was annexed and added to the *suba* of Bengal under Akbar. The temple of Konarak (thirteenth century), is described by Abu'l Fazl in very positive terms.[25] Interesting in this context is the frequent use of dwarf baluster columns supporting the miniature representations of arcades, pavilions, or open halls, decorative motifs on the walls of the temple which are perhaps the reflexion of lost (wooden?) architecture. Real balusters are found in the windows of some temples in Bhubaneswar, e.g., those of the *jagamohana* (hall in front of a shrine) of the temple of Raja Rani (*c.* AD 1000).[26] A close resemblance to the concept though not to the style of the Mughal baluster column is shown in an architectural fragment from Eastern India in the British Museum (eleventh-twelfth century). It was once the frame for a standing Vishnu figure.[27] The similarity lies not only in the shape of the column with the leaf decoration at its foot, but also—especially when compared with the columns of the throne baldachin in Machchhi Bhawan—in the combination of the baluster column with a pot with overflowing leaves. Apparently, this is meant to be the motif of *purna kalaśa* or *purna ghata*, the old auspicious symbol used for pillars in Buddhist and Hindu architecture.[28] The naturalistic pot carved with free overhanging leaves of the columns of the baldachin in Machchhi Bhawan does not occur again in free-standing columns. It was stylised into a vase-like element with leaf decoration, as can be seen in the columns of the loggia of Zenana Mina Bazar in Agra Fort, the loggia near Nagina Masjid, and in some of the later examples in the Delhi Fort (Fig. 2). A similar stylisation is also found in some of the East Indian examples.[29] This use of the baluster column and the *purna ghata* may be interpreted as an archaistic reference to a Buddhist–Hindu motif in an east Indian version.

There is additional evidence that the area of eastern India, particularly Bengal, influenced Mughal architecture. It inspired another salient and fruitful feature of Shah Jahan's palace architecture, the so-called *bangla*,[30] a pavilion with the curvilinear roof that the Bengali peasant hut still shows today.[31] Bengali influence on Mughal architecture is attested by

Abu'l Fazl's well-known statement in the *A'in-i Akbari*: Akbar ordered 500 buildings to be erected in Agra Fort 'in the fine designs of Bangala (*ba-shigarf tarha-i bangala*), Gujarat and others'.[32] There is also an explicit mention of a *mahal-i bangali* (Bengali palace) in Agra (Fort) by Badaoni and Abu'l Fazl.[33] East Indian architecture clearly influenced the architectural enterprises of the Mughals. Adoption of the baluster column from this region—perhaps motivated by a conscious reaching back to an auspicious symbol of Buddhist or Hindu architecture—might be envisaged.

Baluster columns also occur in Transoxania, an area always of high significance for the Mughal dynasty. Here wooden baluster columns of a peculiar elongated shape are a characteristic feature of the local architecture throughout the centuries,[34] together with engaged corner colonnettes in masonry buildings which show a bulb and/or a pot-like element at the foot (Fig. 4).[35] From the time when the founder of the dynasty, Babur, had to renounce the idea of re-establishing the Central Asian empire of his great ancestor Timur, the conquest of Transoxania was always a preoccupation of his successors.[36] Akbar, Jahangir, and Shah Jahan exchanged several embassies with the court of Bukhara before Shah Jahan's unsuccessful attempt to conquer his ancestral domain in the unfortunate Uzbek war of AD 1646.[37]

The Mughal emperors were always anxious to draw attention to their lineage from Timur. Jahangir and Shah Jahan both styled themselves *sahib qiran-i sani*,[38] but Shah Jahan referred to himself as such regularly.[39] This Timurid descent is the theme of a number of paintings and calligraphic works produced under their patronage.[40]

The introduction of the baluster column into Mughal palace architecture might therefore be interpreted as a reference to the Central Asian column. We know from Chandar Bhan Brahman that Shah Jahan employed—among others—artists from Bukhara and Samarkand.[41] The pillars with constrictions and inserted round elements discussed earlier may well have been intended as quotations from Central Asian architecture. The pillars of the central verandah of the east façade of the Jahangiri Mahal in Agra Fort look like translations into stone of the wooden Central Asian examples. They show the same high stalactite capital, the high base and the thin shaft carved with a geometrical design. They lack only the particular bulb of the baluster column and show the inserted pot-like element instead.[42]

This conjecture is further supported by a miniature of Jahangir, whose programmatic uses of dynastic symbolism were of great importance to his son and successor Shah Jahan. In the painting in the

Chester Beatty Library of Jahangir shooting Malik Ambar, there is a stand next to the emperor bearing a medallion with the seals of his ancestors as far back as Timur. Above it is a golden crown, a bird of paradise, and the inscription 'Thy nine ancestors were the crown-bearers of God'.[43] The stand has the shape of an elongated baluster, which may indicate that the Mughals associated a Timurid connection with the baluster form. The Central Asian allusion, however, derives only from the motif, not from the form of Jahangir's baluster, which more closely resembles European prototypes. The slender baluster of the colonnette is enclosed by acanthus leaves which converge at its constriction. An identical baluster—forming part of a sceptre—is found on an allegorical engraving in the possession of the Mughal court. It represents *pietas regia*—the piety of Philip II of Spain as protector of the Catholic faith—the second title-page of the great Antwerp Polyglot Bible,[44] sponsored by Philip II, edited by Arias Montanus, and printed—as his masterpiece—by Christophe Plantin in Antwerp from AD 1568 to 1572. The three title-pages of the first volume have a complex genesis; they seem to have been invented by the Lord High Almoner of Spain, don Luis Manrique, designed by Pieter van der Borcht and engraved by Pieter van der Heyden. A set of this 'Biblia regia' was presented by the first Jesuit mission in AD 1580 to Akbar, who received it with great appreciation.

This European connection points towards another area of influence on Mughal art, which must now be investigated. There is a stronger similarity between Shah Jahan's baluster columns and the European version of this columnar type than there is between the possible prototypes discussed so far.

The baluster, a classical decorative feature of oriental origin,[45] had come back into use in Europe in the fifteenth century and was a widespread feature in sixteenth-century north Italy, Germany, the Netherlands and particularly Spain.[46] Rare as a free-standing functional column, it is a common feature of architectural decoration[47] as in the applied and graphic arts.[48] As a monumental column, however, it is mainly employed by Dürer and his followers from about AD 1515 onwards, and it can be considered one of the chief columnar forms in architectural depictions in the graphic arts of this group of artists.[49] The Düreresque baluster column forms its bulb generally at the foot of the shaft, which is clothed in foliage—usually acanthus leaves. The capitals are in Corinthian manner or 'composite' in the sense of Dürer's period, i.e. 'ornate, sumptuous, complicated'.[50] Other elements can be inserted between column and base (Figs 6, 8, 9).

As we have seen, all these are features of the Mughal column. Not

only does the form and composition of the column coincide, but also the revolutionary naturalistic treatment of the foliate decoration; especially the use of acanthus—hitherto unknown in Mughal architecture—for the capital. This organic acanthus capital is in particular contrast to the geometric *muqarnas* capital of one of the chief columns of Shah Jahan's architecture which is polygonal with a cusped arch base (Fig. 1). Furthermore, the combination of baluster column and semi-circular arch is also entirely new in Mughal, if not in Indo-Islamic architecture[51] and apparently comes from the same sources (Fig. 9).

As already indicated these similarities are not coincidental. From the reign of Akbar onwards European elements played a considerable part in the arts of the Mughal court.[52] It has been shown already in various studies that the main vehicle for western influence in Mughal art was European prints,[53] among which those of Dürer and his circle had a prominent position.[54] Milo Beach sees a definite pattern in the arrival of European prints at the Mughal court and considers that the Dürer prints belong to the earliest group to exert an influence.[55] Dürer was, of course, appreciated, copied and collected in Europe throughout the sixteenth and seventeenth centuries.[56] He appears to have been a favourite of the Counter Reformation,[57] so that his works would be likely to figure prominently among the pictorial material introduced by the Jesuit missions as aids to evangelisation at the Mughal court from AD 1580 onwards. At the beginning of the seventeenth century in particular there was an especially strong European revival of interest in Dürer. His prints were sought after for the collections of the European courts and the production of posthumous impressions reached its biggest point about AD 1600.[58] The reception of Dürer prints or reprints at the Mughal court was thus certainly not limited to an early date. Since Jahangir supervised the copying of prints and reprints of Dürer and his school and included them as well as Mughal copies in royal albums (*muraqqa'*-s),[59] one must consider him one of the more important figures in the international Dürer revival of the early seventeenth century.

The Antwerp Polyglot Bible, illustrated by Flemish artists familiar with the work of Dürer, provides further evidence that engraved monumental baluster columns were known to the Mughal court. On the second title-page of the first volume—*The Authority of the Pentateuch*—scenes from the *Old Testament* are enclosed in an architectural frame. This has two Corinthian columns with a baluster element at their foot, a more academic interpretation of the Düreresque column. Noteworthy is the elaborate acanthus decoration. The columns are close in conception to those of the loggia above the Zenana Mina Bazar. In particular, the

clearly defined areas for the use of the acanthus, the arrangement of the leaves of the capitals, which have their tops turned in little volutes, and the reinterpreted fluting are reminiscent of the columns in the print.

These western prints were a source of images, a sort of extended pattern-book, not only for certain iconographic features but also for the development of style in Mughal painting.[60] Mughal artists used the European models in all possible ways, from direct copying[61] to combining various elements taken from different pictorial contexts and forging them into a new pictorial whole.[62]

So far the influence of these 'paper academies'[63] on Mughal architecture has not been studied, if we leave aside Robert Skelton's observations on 'the Mughal decorative motif par excellence' from about AD 1620 onwards, that is, 'The formal flowering plant spaced regularly on a plain ground'.[64] This motif was also introduced in architecture. The characteristic dado of Shah Jahan's buildings is formed of marble flowers carved in subtle relief, monumental descendants from Pierre Vallet's *Jardin du Roi* of AD 1608 or other herbals,[65] copied by Jahangir's painters and transferred to marble by Shah Jahan's stone-carvers.

Baluster colonnettes sometimes occur in an analogous situation to that of the marble flowers. The earliest example, apparently, is in the dado of the *jharoka* of the Diwan-i 'Amm in Agra Fort (Fig. 7). The plant-like character of the baluster column, reinforced by its leaf ornamentation, must have suggested this use. Like the flower motif, therefore, the baluster column may be assumed to have been taken over from western prints at a time when Mughal artists were sufficiently familiar with the western apparatus of forms to be able to transpose graphic models into another medium.[66] The Mughal artists handled these models quite freely. Robert Skelton has shown how, in the second quarter of the seventeenth century, 'The most astonishing juxtapositions of flowers and leaves were already being carried out'.[67]

This confident handling of graphic prototypes is even more evident in the use of the baluster column where two-dimensional models had to be translated into three-dimensional, functional architectural members. There again we do not find exact repetition of the graphic columns of Dürer and his followers. Different prototypes were apparently amalgamated into one column. The mannerist form was also able to accommodate indigenous traditional forms like the Bengali baluster column which in turn may have created a favourable climate for the reception of the western form. This mutual interaction can be observed for example for the *purna kalaśa* motif of the columns of Machchhi Bhawan or the *guldastas* of Nagina Masjid. The almost classical fluting of the former was

changed for a more meaningful shape in the tradition of Indo-Islamic architecture. The alternating round and angular vertical fluting of the columns of Zenana Mina Bazar seem for example to be quotations in miniature of the fluting of the Qutb Minar: its characteristic profile was referred to throughout the centuries in Islamic architecture round Delhi.[68] The acanthus leaves were already, in the palaces of Delhi, partly transformed into the more familiar lotus petals.[69]

The potential of the form of the Mughal baluster column was thus well understood and used by the Mughal artists. This is also clear from the fact that from the very beginning of its reception into Mughal architecture it was used in the whole range of its possibilities: in relief, as a decorative architectural feature and as a functional architectural form.

Such a comprehensive reception of a form in a different cultural milieu implies that the form is charged with a particular meaning.[70] The form of the Mughal baluster column, taken from European prints, was more easily assimilated because specific forerunners in East Indian and Central Asian architecture had created an interest in it. We remember further that the baluster column—a plant-like form of a column—made its appearance in the palace architecture of Shah Jahan at the same time as flower reliefs borrowed from European herbals. Both motifs are predominant features of what might be called a vegetabilisation programme of the palace buildings of the Emperor. The intention behind this process was to transform the palace buildings into gardens, as is evident from contemporary descriptions. '*Dar o diwarash az taswir gulzar*' (its doors and walls suggest flower beds) says Kanbo[71] of the buildings east of the Hayat Bakhsh Garden, or Muhammad Waris, the historian of Shah Jahan's later reign, describes the baluster columns of the pavilions in the Hayat Bakhsh Garden (among others) *expressis verbis* as '*sarw andam*' (cypress-bodied).[72] The borrowing of these forms from plant-life was, however, not meant to create the generalised image of a garden but the image of a very specific one. '. . . every house is so pleasing to the mind and agreeable to the heart that it looks like the garden of Rizwan (the gardener of Paradise) and seems to be one of the apartments of the palaces of heaven.'[73] There was nothing new in the idea of relating the dwellings of an Islamic ruler to one or the other aspect of Paradise. What is remarkable is the transformation of the literary model of the archetypal image of Paradise—the eternal garden of the Koran—into an architectural reality. To give Shah Jahan's Paradise garden rooms an aspect of reality which would satisfy the keen sense of naturalism of a descendant of the Timurid house, models of the highest degree of naturalism then available were chosen. These were European. Stylised though these

may seem to us, to Shah Jahan and his advisers, they must have seemed the height of naturalism.

The baluster column was the form most apt to meet this demand. There can be little doubt that in the eyes of the Mughals the columns of the third title-page of the Antwerp Polyglot Bible gave the form further significance. Inscriptions on their pedestals refer to the house of God (*Vere domus Dei ista*) and to heaven (*Et haec porta caeli*). Attributes taken from Christian subjects (such as angels, haloes) were freely borrowed for the representation of Jahangir and Shah Jahan as apotheosised rulers.[74] We may therefore assume that the connotation of heaven attached to the acanthus-decorated baluster columns in the engraving served as a further incentive to introduce this shape in the garden paradise buildings of the Emperor. Selective use of the first baluster columns in Mughal palace architecture leads to a further step in interpretation. We have contemporary literary evidence that Shah Jahan's artistic activities were considered an instrument to reinforce the power and to represent the glory of Mughal rule. Muhammad Salih Kanbo states in the introduction to his description of the newly founded Shahjahanabad (Delhi): 'Whenever the highest Wisdom of the Majesty exalted above all [God]—may his proof be exalted everywhere—out of concern for His servants and His countries finds it apt to choose a dynastic Family from the other families of sultans of the world, he bestows special selection on the lords of that God-given empire among all other masters of empires with perfect grandeur and majesty and he gives necessarily whatever is essentially connected with [maintenance] of the rule. [Such matters] may belong [to the category] of beautiful and external things the existence of which is not so necessary [in the context] of overall rule, but they must be [present] to give full distinction and spectacular display—the more so since it becomes a matter of increase of pomp and power, magnificence and elegance. . . . It is evident that the increase of such things creates esteem for the rulers in the eyes [of the people] and augments respect [for the ruler] and [their own] dignity in [their] hearts. In this form the execution of divine injunctions and prohibitions and the enforcement of divine decrees and laws which is the ultimate aim of rulership and kingship are carried out in a better way.'[75]

In the description of the daily routine of Shah Jahan 'Abd al-Hamid Lahauri is at pains to point out the decisive part played by the Emperor as his own architect in the planning of his buildings. Most were designed by his 'precious self' (*ba-nafs-i nafis*) and he made 'appropriate alterations to whatever the skilful architects designed after many thoughts and he asked competent questions'.[76]

It has already been pointed out that the first known example of baluster columns in Mughal architecture occur only in the palace buildings. Even there they are used in a particular way. The earliest examples of the baluster column as free-standing functional architectural members (in Agra) occur only in the architectural framework for ceremonial appearances of the ruler, for the baldachin which housed the golden throne of Shah Jahan in Machchhi Bhawan and for the loggia in the Zenana Mina Bazar and the loggia near Nagina Masjid. Even in the later palace buildings of Delhi baluster columns are still closely related to the person of the Emperor. They support the throne *jharoka* in the Diwan-i 'Amm and the pillared hall of Shah Burj, a building, according to Lahauri and Kanbo,[77] solely used by the Emperor and the imperial children. They appear in the central river-side window of the Diwan-i Khass, in front of the throne platform.

The evidence in paintings up to the 1630s corroborates this. Baluster columns are used for the throne of Jahangir celebrating the Ab Pashi festival (AD 1614),[78] for the throne in the Durbar scene in the Keir collection (AD 1620)[79] and for the various representations of Shah Jahan's famous peacock throne (completed in AD 1634–5).[80] The exclusive use of the baluster column to frame the ceremonial appearance of the Emperor leads us to ask whether it had a particular meaning in addition to its connotations of Paradise attached to the palace buildings.

We have seen that whereas the baluster column as a functional architectural element is rare in the architecture of Europe, it is a characteristic feature of the 'graphic architecture' of Dürer and the artists under his influence. It seems fair to assume that it came from these prints into Mughal art. Furthermore, there is a remarkable similarity between the Mughal and Düreresque baluster column not only in shape but also in their architectural setting wherever the graphic column is used, like the real one, for the architectural frame in which the ruler appears. The architectural arrangement of the ceremonial appearance of the Mogul before his subjects in the *jharoka-i darshan* and the appearance of the rulers represented by Dürer and his circle—very often the Habsburgs—are strikingly parallel, not only in the combination of baluster columns with a baldachin, but also in the appearance of the ruler as a half-figure.[81] The similarity of the architectural setting apparently conditioned the reception of the form.

There is other evidence that the Great Mogul associated himself with European princes in his artistic undertakings. Otto Kurz has pointed out the predilection of the Mughal emperors for assembling their

ancestors in historical portrait groups, which he calls *conversazione*, or conversation pieces.[82] Jahangir introduced another version of these imaginary meetings in which he is visited by foreign rulers, past and present—for instance Shah Abbas from Iran and James I of England.[83] We also know that he had the walls of his palaces painted with, among other subjects, portraits of European rulers. Sir Thomas Roe describes how he was entertained by Mir Jamal al-Din Husain in the Emperor's Palace Chasma-i Nur (Fountain of Light) at Hafiz Jamal near Ajmer on 12 August 1616: '. . . Hee entertayned mee with showeing the Kings little closetts and retyring roomes, which were paynted with antique and in some panes [i.e., panels] copyes of the French kings and other Christian princes . . .'[84]

For the palace in Agra there is evidence for a Habsburg connection. Guerreiro tells us in his *Relation* of AD 1607–8: 'In one of the panels of one of the halls he directed to be made, from a design [print] which he had, whole-length paintings of the Pope, the Emperor, King Philip and the Duke of Savoy, whose portraits he possessed. They are all represented on their knees, adoring the Holy Cross which stands in their middle.'[85]

For whatever reason Jahangir associated himself with 'the Christian princes'—and all evidence suggests that it was to show his world-wide connections and his international status as a ruler belonging to the family of the kings of the world—[86] we can assume safely that it made some impression on the artistic programmes of Shah Jahan who, as has been indicated, seems to have taken over most of the dynastic symbolism developed for the more imaginative Jahangir.[87]

Taking into consideration Shah Jahan's inclination towards architecture, it is tempting to conjecture that he gave the ideas of his father an architectural expression. In choosing the baluster column as frame for his appearance, he was showing that he wanted to belong to those Christian princes whom he had seen represented in this way. He may even, in a kind of creative misunderstanding, have taken the baluster column for a symbol of imperial might.

Was it really a misunderstanding? There is a moment in European architecture when the baluster column seems to have acquired that very meaning. During the reign of Charles V, Diego da Sagredo in his *Medidas del Romano*—'the key document for the study of early Renaissance architectural developments in Spain'—[88] introduces the baluster column, which so far had been given only passing remarks in the columnar theory,[89] into his discussion of the Vitruvian orders.[90]

Nigel Llewellyn has suggested that Sagredo tried to give the baluster

column—by then already a common feature in Spain—the status of a 'Spanish order'. Sagredo links the baluster to the pomegranate, its etymological equivalent,[91] which had by this time acquired a special emblematic meaning in connection with the Habsburg rulers of Spain from Maximilan (AD 1493–1519) onwards. Llewellyn's assumption seems to be supported by the fact that Charles V's far better known device, the twin columns, were occasionally also given the shape of baluster columns (Fig. 6).[92] The columns and the famous imperial motto *Plus Ultra* had acquired, by the mid-sixteenth century, the meaning of 'further beyond the columns of Hercules', reflecting the prediction of the endless expansion of the dominions in the New and Old World and the Power of Charles V, ruler of the entire earth.[93]

In the person of Charles the old Hellenistic-Roman ideas of universal empire, of the sacred rule of the One over the whole world whose imperial function is to maintain *pax* and *justitia*, were revived and reamalgamated with the Christian version of this theme, the office of the Holy Roman Emperor. This vision had a profound effect on the development of the mythologies of the national monarchies in Europe, such as the Tudors or the French kings.[94]

Had it also reached the Mughal court where a World-holder (Jahangir) was succeeded by a World-ruler (Shah Jahan)? The globe is as common an attribute at the Mughal court[95] as at the European courts which drew on Charles V's symbolism.[96] Comparable political applications are the Mughal court representation of lion and sheep lying together near the Emperor,[97] the chain of justice and the scale of justice of Jahangir and Shah Jahan.[98] The justice of Shah Jahan became a kind of leitmotif for his historians and poets: 'If—as happens occasionally—the tyranny and [moral] impurity of the Turk and Turkman sultans is mentioned in the assembly, the characteristic of which is justice, his [i.e., the Emperor's] sacred temper turns melancholic because justice and equity are embedded in his sacred character and it has become repeatedly on his tongue which speaks bounties: . . . All created beings are entrusted by the great creator [to the ruler] and therefore they should be in the cradle of peace and in the safety of comfort. And without equity and justice he [the ruler] does not deserve this exalted status and he is not accepted at the threshold of God.'[99]

These striking parallels in the argument for absolute rulership between the European courts influenced by Charles V and the Mughal court created a favourable climate for the adoption of forms. It may be, therefore,

that Charles V's columnar device had its impact not only on the monarchical symbolism of Europe but also on that of the Mughal court. The columns of Charles V's printed device were apt, once they had been converted into real architecture, to represent symbolically different aspects of Shah Jahan's regal power. In a Hindu context they were the East Indian version of an ancient auspicious symbol; in a dynastic, they were an allusion to the country of the Mughals' origin. In the end, the use of the European version of the baluster as a plant-like column in the terrestrial marble paradise of a Mughal emperor restored the motif to its oriental origin. Moreover, its ambivalent potential gave Shah Jahan's baluster column its dominance in the future.

The baluster column of the type discussed became the dominant architectural columnar form of all later north and central Indian architecture (which has not so far been the object of any special study). It is found in minor architecture as well as palaces, mosques and temples. Especially noteworthy is the reception of the Mughal baluster column in Hindu religious architecture, a particularly telling example being the temple of Visvesvara of Vishvanath, the principal temple of Benares (rebuilt in the eighteenth century). The baluster column also became a common feature of painted representations of architecture in the miniatures of the later Mughal and local painting schools of the eighteenth and nineteenth centuries.[100] It came to be considered as such a typical feature of Indian architecture that it was taken over as such to Britain in the first and second Indian Revival (Fig. 10).[101]

Notes and References

1. As far as I know what little literature on the baluster there is deals only with European examples. See Herbert Siebenhüner, 'Docke', *Reallexikon zur Deutschen Kunstgeschichte* (Munich, 1958); Rudolf Wittkower, 'The Renaissance Baluster and Palladio', *Palladio and English Palladianism* (London, 1974). Neither author deals explicitly with the baluster as a functional column. Nigel Llewellyn does so in his 'Two Notes on Diego da Sagredo, II: The Baluster and the Pomegranate,' *Journal of the Warburg and Courtauld Institutes*, vol. 40, 1977, pp. 294–300.
2. See for instance Oscar Reuther, *Indische Paläste und Wohnhäuser* (Berlin, 1925), pp. 62, 65, 74 and plates 91–3, 96–7, 100, 113, 150–1, 164, 172.
3. For the Red Fort in Agra see especially Nur Bakhsh, 'The Agra Fort and its Buildings', *Archaeological Survey of India, Annual Report* (hereafter *ASI, Ann. Rep.*), 1903–4, pp. 164–93, and Muhammad Ashraf Husain, *An Historical Guide to the Agra Fort* (Delhi, 1937).

4. Nur Bakhsh, 'Historical Notes on the Lahore Fort and its Buildings', *ASI, Ann. Rep.*, 1902–3, pp. 218–24; Mohammad Abdullah Chaghtai, *A Brief Survey of the Lahore Fort* (Lahore, 1973) (in Urdu).
5. Gordon Sanderson, 'Shah Jahan's Fort, Delhi,' *ASI, Ann. Rep.*, 1911–12, pp. 1–27; *idem, A Guide to the Buildings and Gardens, Delhi Fort*, 1918, 4th edn (Delhi, 1937).
6. I deal exclusively with the examples of Shah Jahan's reign.
7. As far as I know, only the *terminus ante quem* of most of the palace buildings of Shah Jahan in Agra is certain. They are described on the occasion of the weighing ceremony of the 45th solar birthday of the Emperor on Friday, 19 Sha'ban AH 1046 (16 January 1637) by 'Abd al-Hamid Lahauri, the official historian of Shah Jahan's reign, in his *Badshah Namah*, vol. I (Calcutta, 1867), pp. 235 ff. This is corroborated by the inscription on the Diwan-i-Khass (Hall of Private Audience) giving the chronogram of its completion in AH 1046 (AD 1636–7).
8. We have so far no certain date for this loggia, nor do we know its function. Muhammad Latif, *Agra: Historical and Descriptive* (Calcutta, 1896), pp. 95–6, describes it as a balcony overlooking the courtyard where the Zenana Mina Bazar took place, but does not give a reference for this. M.A. Husain, *Guide to Agra Fort* (Delhi, 1937), pp. 30–2, suggests that this courtyard served as forecourt to the adjacent court of Machchhi Bhawan. In any case, the loggia shows the typical features of Shah Jahan's buildings, e.g., poly-lobed arches, baluster columns and acanthus decoration, and can be safely attributed to the building phase completed in AD 1637. Compare especially the arches with nine lobes and two half-lobes over the shorter side of the loggia with the identical arches of the arcades of Machchhi Bhawan which feature as *sahn* (courtyard) in the above-mentioned description of Lahauri, *Badshah Namah*, p. 238.
9. Wittkower, 'Baluster' pp. 42 ff., refers to this parts as 'bulb'.
10. The columns and *jali*-screens of this loggia are similar in design to those in the loggia above Zenana Mina Bazar. A certain stylisation and carelessness in the execution may indicate a later date.
11. There are also two marble baluster columns above the Delhi Gate of the Agra Fort which originally belonged to a no longer visible pavilion. That this was a *naqar khanah* (drum house) can be deducted from nineteenth-century paintings, e.g., India Office Library, Add. Or. 3,125. The erection of the outer wall and gateways of the Fort around AD 1660 is attributed to Aurangzeb by Muhammad Kazim in his *Alamgir Namah* (Calcutta, 1865–8). See Husain, *Guide to Agra Fort*, p. 3. Accordingly, these baluster columns do not belong to the period of our study.
12. The *jharoka* or *jharoka-i darshan* was a special window, balcony or throne baldachin in which the Emperor appeared before his subjects. See Nur Bakhsh, 'Agra Fort', pp. 172, 176, 188; Lahauri, *Badshah Namah*, pp. 144–7.
13. For the Shah Burj see Gordon Sanderson, 'The Shah Burj, Delhi Fort', *ASI, Ann. Rep.* 1909–10, pp. 25–32 and plate IX.

14. For an illustration see Andreas Volwahsen, *Islamisches Indien* (Munich, 1969), p. 121. The arcaded filling of the central arch of the west façade with the same slender baluster columns is not preserved but appears in the illustration of the Rang Mahal in Sayid Ahmad Khan's *Asar al-Sanadid*, trans. R. Nath, *Monuments of Delhi* (New Delhi, 1979), illus. 7.
15. This railing is preserved only in two reconstructed pieces on each side of the central causeway of the Anguri Bagh. See W.H. Nicholls, 'Railing in the Anguri Bagh at Agra', *ASI, Ann. Rep.*, 1906–7, pp. 15–6, fig. 1.
16. The exact date of the Moti Masjid in the Lahore Fort has not yet been established. John Burton Page, 'Lahore Fort', in M. Wheeler, ed., *Splendours of the East* (London, 1970), p. 91, for instance, dates it AD 1645 without a reference. See pp. 86–7 for illustrations. The use of cusped arches and acanthus decoration is characteristic of Shah Jahan's buildings.
17. So far we do not have a date for this mosque. From all formal evidence it belongs to the period of Shah Jahan's reign. See also Husain, *Historical Guide*, pp. 29–30, and R. Nath, *Agra and its Monumental Glory* (Bombay, 1977), pp. 37–8, plate 25.
18. There is no detailed study of the earlier use of the column or pillar in Indo-Islamic architecture. Columns or pillars up to Shah Jahan's reign consist of polygonal and square elements, used separately or combined. See for instance Percy Brown, *Indian Architecture*. Slamic Period, 1956, rpt. (Bombay, 1975), plate VI, fig. 2; plate VII, fig. 1; plate XVI, fig. 2; plate CVII, fig. 2. Round columns or round elements are rare.
19. For examples from the twelfth century to Shah Jahan's reign see Brown, *Indian Architecture*, plates VIII, IX, XVIII, fig. 2, LXV, fig. 1; CI, fig. 2; and *ASI, Ann. Rep.*, 1903–4, fig. 3. Recently the use of these engaged colonnettes in the pre-Mughal Islamic architecture of the Delhi region has been discussed by Catherine B. Asher, 'The Qal'a-i Kuhna Mosque: A Visual Symbol of Royal Aspirations', *Chhavi*, vol. 2 (Benares, 1981), pp. 213 f.
20. Brown, *Indian Architecture*, plate LXXIII, fig. 2; and Athar A. Rizvi and Vincent Flynn, *Fathpur-Sikri* (Bombay, 1975), plates 70 and 78.
21. This has already been noticed by Reuther, *Indische Paläste*, p. 62, who goes so far as to suggest that the Mughal baluster column was developed out of this architectural decorative element and thus represents an enlarged and monumentalised version of it
22. For example of sculpture from Bihar and Bengal from about the eighth to the twelfth centuries see R.D. Banerji, *Eastern Indian School of Medieval Sculpture* (Delhi, 1933), plates XVIIA, XXVIIC, XXIXD, LXIIIB and C; all showing baluster colonnettes framing niches with images: plate LXXIVE, which shows baluster stands for conch shells.
23. Ibid., pp. 151 ff., plates LXXXVIC and LXXXVIIB. For an example of true Buddhist architecture see the balusters forming part of a railing in a Buddhist monastery (ninth-twelfth centuries), excavated in Antichak, near Bhagalpur in Bihar, *Indian Archaeology*, 1974–5, pp. 7f, plate VII. Perhaps this baluster motif results from a latent after-effect of antique forms in East India, which was a

retreat area of Buddhism. The baluster as a decorative motif was also used by Islamic patrons, for instance the tomb of Ghiasuddin Azam Shah, *c.* 1410 in Sonargaon; see Ahmad Hasan Dani, *Dacca* (Dacca, 1962), pp. 257–8, plate XVIII.

24. Banerji, *Eastern Indian School*, pp. 150–1.
25. *A'in-i Akbari*, trans. H.S. Jarrett, 2nd rev. edn, Jadunath Sarkar, vol. II, 1949, rpt. (New Delhi, 1978), pp. 140–1.
26. See Mano Mohan Ganguly, *Orissa and Her Remains, Ancient and Medieval* (Calcutta, 1912), p. 315 and plate V (A), fig. 1.
27. Bridge Collection, 1872, 7–1.48. It is on exhibition in the Indian Gallery of the British Museum, London.
28. For the motif of *purna kalaśa* in Mughal architecture see R. Nath, *History of Decorative Art in Mughal Architecture* (Delhi, 1976), pp. 6–10. He also interprets the motif of the columns of the throne baldachin in Machchhi Bhawan as *purna kalaśa*; ibid., p. 8.
29. See Banerji, *Eastern Indian School*, plates LXIIIb, LXXXVIc, LXXVIIb.
30. Lahauri *Badshah Namah*, I/2, pp. 240–1, for example, calls it *bangla*. So does Muhammad Salih Kanbo, *'Amal-i Salih or Shah Jahan Namah*, vol. III, 1939, rearranged rpt. (Lahore, 1960), p. 42. Kanbo wrote a detailed history of Shah Jahan's reign which was completed about AD 1670 and provides an alternative view, independent of Lahauri's official history of Shah Jahan's reign (n. 7 above).
31. See especially Ahmad Hasan Dani, *Muslim Architecture in Bengal* (Dacca, 1961), pp. 12–14; Klaus Fischer, *Dächer, Decken und Gewölbe indischer Kultstätten und Nutzbauten* (Wiesbaden, 1974), pp. 76, 80, 139, 140, plate 32, fig. 237; Anthony King, 'The Bengali Peasant Hut: Some Nineteenth-Century Accounts', *Art and Archaeology Research Papers 12*, December 1977, pp. 70–8, esp. p. 76.
32. Abu'l Fazl, *A'in-i Akbari*, vol. II (Lucknow, 1869), p. 157.
33. Al-Badaoni, *Muntakhabu'-t-Tawarikh*, trans. W.H. Lowe, 2nd edn, vol. II, 1899, rpt. (Delhi, 1973), p. 74 and Abu'l Fazl, *Akbar Namah*, vol. II (Calcutta, 1879), p. 340. The latter reads *bangali mahal*.
34. For example, from the tenth century onwards see V.L. Voronina, 'Kolonny sobornoi mecheti v Khive' (The [wooden] Columns of the Friday Mosque at Khiva), *Arkhitekturnoye nasledstvo*, no. II, 1958, pp. 145–80. For a fifteenth-century example from the tomb of Hazrat-i-Bashir in Samarqand see G.A. Pugachenkova, *Zodchestvo Tsentral'noi Azii XV vek* (The Architecture of Fifteenth Century Central Asia) (Tashkent, 1976). I thank Dr Michael Rogers for helping me with these references. For examples in Bukhara from the sixteenth to the twentieth centuries, see A.G. Pugatschenkowa [Pugachenkova], *Samarkand Buchara* (Berlin, 1975), illus. 4, 31, 43, 60, 68, 71, 84.
35. E.g., ibid., illus. 5, 9, 47, 64, 74.
36. Jahangir himself writes about this in his memoirs, *Tuzuk-i Jahangiri*, trans. Alexander Rogers, ed. Henry Beveridge, 2nd edn (1909–14) rpt. (Delhi, 1968), vol. I, p. 26.

37. Abdur Rahim, 'Mughal Relations with Central Asia,' *Islamic Culture*, vol. 11, 1937, pp. 81–94, 188–99. For Shah Jahan's relations with Transoxania see also Banarsi Prasad Saksena, 'Trans-Oxiana' [*sic*], *History of Shah Jahan of Dihli*, 1932, rpt. (Allahabad, 1976), pp. 182–209.
38. See *Tuzuk-i-Jahangiri*, vol. I, p. 12, where Jahangir features as *Sahib Qiran-i Sani Shahinshah Jahangir* in a versified chronogram by Maktub Khan for his accession.
39. Shah Jahan assumed upon his accession the titles *Abul Musaffar Shihabuddin Muhammad Sahib Qiran-i Sani*. See Saksena, *History*, p. 63 and Lahauri, *Badshah Namah*, I/1, p. 91. The accession ceremony included an oration in which Shah Jahan's ancestors were eulogised: 'For the sake of the beauty of the poem of fortune he [the orator] made the exalted name of *sahib qiran* the *awwal matla* [introductory verse of a poem] and the glorious name of *sahib qiran-i sani*, the *husn matla* [verse which supports and embellishes the *awwal matla*]: Kanbo, *Amal-i Salih*, I, 1958, pp. 173–4; cf. Lahauri, ibid., I/1, p. 90. My translation. I thank Dr S.M. Yunus Jaffery for his advice and help in translation from Persian and Urdu sources.
40. E.g. the genealogical trees painted for Jahangir and Shah Jahan and 'a-historical portrait group[s] in which the representatives of succeeding generations were shown assembled as if they were contemporaries', Otto Kurz, 'A Volume of Mughal Drawings and Miniatures', *Journal of the Warburg and Courtauld Institutes*, vol. 30, 1967, p. 262.
41. See Chandar Bhan 'Brahman', *Char Chaman* (Persian), bound in British Library MS Add. 16863, fol. 22.
42. The pot-like element which acts like a cut-off bulb is also found in some Central Asian examples. For an early example of a striking similarity to the columns of the Jahangiri Mahal see the three-quarter colonnettes in the inner dome of the Mausoleum of the Samanids in Bukhara (ninth-tenth centuries); Pugatschenkowa, *Samarkand*, illus. 64. Some of the columns in the Friday mosque of Khiva show a depression between shaft and bulb which gives the bulb a pot-like appearance, very reminiscent of the *purna kalaśa* motif discussed above—the more so as they are decorated with four overhanging leaves. See especially Voronina, '*Kolonny sobornoi*', plates 6–9. It would be interesting to trace the common root of this motif.
43. Thomas W. Arnold and J.V.S. Wilkinson, *The Library of A. Chester Beatty: A Catalogue of the Indian Miniatures* (London, 1936), vol. I, pp. 31–2; vol. III, plate 62. I am grateful to Robert Skelton for calling my attention to this baluster colonnette.
44. The King's piety is represented by a woman on a pedestal flanked by a sword and the baluster sceptre. Both are held in an upright position by hands on pedestals which are inscribed respectively *Aut Gladio* and *Aut Verbo* and symbolise the means by which the King carries out his task. Here, as in Jahangir's painting, the baluster is an attribute of the ruler and placed in a position similar to that in the picture. For the genesis of the Bible see especially Max Rooses, *Christophe Plantin, Imprimeur anversois*, 2nd edn (Antwerp,

1896), pp. III-48. For the influence of the title-page of the first volume of the Bible see my 'The Influence of the Jesuit Missions on Symbolic Representations of the Mughal Emperors', C.J. Troll (ed.), *Islam in India, Studies and Commentaries*, I (Delhi, 1982).

45. The baluster with plant decoration seems to be of Egyptian provenance (papyrus column) taken over and adapted as a decorative motif because of the romantic interest in Egypt during Roman imperial times.
46. Seen n.1 above, esp. Siebenhüner, *Reallexikon*.
47. Especially in Spain where baluster columns with foliage decoration are characteristic of the *estilo ornamentado*. See J.B. Bury, 'The Stylistic Term "Plateresque"', *Journal of the Warburg and Courtauld Institutes*, vol. 39, 1976, pp. 199–230. For example, see Albrecht Haupt, *Geschichte der Renaissance in Spanien und Portugal* (Stuttgart, 1927), plates 34, 48, 52, 58, 82, 119; and Jose Camon Aznar, *La Arquitectura Plateresca* (Madrid, 1945), figs 10, 39, 51, 53, 68, 111, 170, 194, 230, 249, 263, 400, 411, 412, 498. Even as the less common free-standing functional column it retains its decorative qualities, forming part of a composition of several members placed one above the other. See for instance the columns carrying the arcades in the courtyard of the Casa Zaporta in Zaragoza of about AD 1540 (Haupt, ibid., plate 48) or—to quote a non-Spanish example—the columns in the first court in the place of the prince-bishop in Liege (AD 1526–38), for which see Georg Kauffmann, *Die Kunst des 16. Jahrhunderts*, Propylaen Kunstgeschichte, VIII (Berlin, 1970), pp. 373–4, plate 379.
48. Siebenhüner, *Reallexikon*, cols 101–3; Heinrich Kohlhaussen, *Nürnberger Goldschmiedekunst des Mittelalters und der Dürerzeit 1240–1540* (Berlin, 1968), plates 566, 658, 688, 722. See also, for its appearance on ornamental frontispieces, Rudolf Berliner, *Ornamentale Vorlageblätter des 15–18. Jahrhunderts* (Leipzig, 1926), Tafelband 1, 18, 27, 29, 77; on patterns for decorated objects, Kohlhaussen, ibid., plates 523, 541, 580; and on designs for furniture, Max Geisberg, *The German Single-Leaf Woodcut 1500–50*, 1923–30, rev. edn Walter L. Strauss (New York, 1974), vol. III, pp. 805, 806, 807, 863, 864, and 925.
49. Erik Forssmann, *Säule und Ornament. Studien zum Problem des Manierismus in den nordischen Säulenbüchern und Vorlageblättern des 16 und 17. Jahrhunderts* (Stockholm, 1956), pp. 49–53.
50. Ibid., p. 49.
51. The European provenance of the baluster column and semi-circular arch in Mughal architecture has already been suggested by Hermann Goetz, *Bilderatlas zur Kulturgeschichte Indiens in der Grossmoghulzeit* (Berlin, 1930), p. 59.
52. H. Hosten, 'European Art at the Moghul Court', *Journal of the U.P. Historical Society*, vol. 3, no. 1, 1922, pp. 110–84.
53. For European influence in Mughal painting, see Ernst Kühnel and Hermann Goetz, *Indian Book Painting from Jahangir's Album in the State Library, Berlin* (London, 1926); E.D. Maclagan, 'The Missions and Mughal Painting', in *The Jesuits and the Great Mogul* (London, 1932), pp. 222–67; Milo Cleveland Beach, 'The Gulshan Album and its European Sources', *Bulletin of the Museum of Fine Art*, Boston, vol. CCCXXXII, 1965, pp. 63–91; Ashok Kumar Das, *Mughal Painting during Jahangir's Time* (Calcutta, 1978); M.C. Beach, *The Grand Mogul: Imperial Painting in India 1600–60*, Williamstown (1978), with further literature.

54. Kühnel and Goetz, *Indian Book Painting*, pp. 46 ff.; Maclagan 'The Missions', p. 249; Beach, 'Gulshan Album', pp. 67 ff.; Das, *Mughal Painting*, pp. 237–8.
55. Beach, *Grand Mogul*, p. 155.
56. Hans Kauffmann, 'Dürer in der Kunst und im Kunsturteil um 1600', *Vom Nachleben Dürers. Beiträge zur Kunst der Epoche von 1530 bis 1650*, Anzeiger des Germanischen Nationalimuseums, 1940–53, pp. 18–60.
57. Kauffmann, ibid., pp. 27–8. For a contemporary source see Gabriele Paleotti, *Discorso intorno alle imagini sacre e profane* (Bologna, 1582), ed. Paola Barocchi, *Trattati d'arte del Cinquecento* (Bari, 1961), vol. II, p. 167, where the exemplary character of Dürer and his works is especially mentioned.
58. Kauffman, ibid., pp. 24–7. The work of the Antwerp print-markers of the later sixteenth century (like the Sadeler family, Cornelis Cort, Jerome Wierix, Hendrik Goltzius) which had reached the Mughal court, included reproductions of Dürer (cf. n.53 above).
59. See especially Kühnel and Goetz, *Indian Book Painting*, 'Gulshan Album'.
60. See, among others, Beach, *Grand Mogul*, pp. 24–7; Das, *Mughal Painting*, pp. 240–2.
61. See Das, *Mughal Painting*, plates 68, 70–4; Beach, *Grand Mogul*, plates 9, 54, 54A, 55.
62. Beach, *Grand Mogul*, plate 10; Das, *Mughal Painting*, plate 63.
63. I am adopting here a term of Forssmann's (*Säule und Ornament*, p. 86). He uses 'papierene Akademie' for a similar phenomenon, namely the role played, in his view, by architectural treatises and ornamental engravings for northern artists in sixteenth- and seventeenth-century Europe.
64. Robert Skelton, 'A Decorative Motif in Mughal Art', in P. Pal, ed., *Aspects of Indian Art* (Leiden, 1972), p. 150.
65. Ibid., p. 151 plates LXXXVI, XC, XCI.
66. The use of European ornaments in architecture is mentioned, in another context, by Kanbo *'Amal-i Salih*, vol. 3, p. 35. He speaks about the Indian artists who used as the decoration of the ceiling of the *ghusl khanah* (*Diwan-i Khass*) in Delhi Fort: 'heart-ravishing designs [nooses], pleasant to the mind of the *farangis*'.
67. Skelton, 'A Decorative Motif', p. 152.
68. I am studying this problem. Sections with the characteristic round and angular moulding are inserted in, for instance, the tapering turrets engaged at the quoins of buildings like the mosque of Bara Gumbad (AD 1494), Moth ki Masjid, Jahaz Mahal (both datable about AD 1500). See Y.D. Sharma, *Delhi and its Neighbourhood*, 1964, 2nd edn (New Delhi, 1974), plates XVII, XIXB, XXA; the turrets flanking the east (main) entrance of Khirki Masjid (AD 1351–88); the minaret-like engaged pillars flanking portals, e.g., the Buland Darwaza and the central arch of the Jami Masjid in Fathepur Sikri (S.A.A. Rizvi and

V.J. Flynn, *Fathepur Sikri*, Bombay, 1975, plates 52, 64); the minarets on the main gateway of Akbar's tomb in Sikandra (*ASI, Ann. Rep.*, 1905–6, plates VII, IX).

69. For the process of replacing acanthus by lotus in Mughal architecture see also Goetz, *Bilderatlas*, p. 59.
70. Guenter Bandmann, 'Ikonologie der Architektur', *Jahrbuch für Aesthetik und allgemeine Kunstwissenschaft*, vol. I, 1951, p. 109.
71. Kanbo, *'Amal-i Salih*, vol. III, 1960, p. 40. Kanbo quotes here a verse of a *masnawi* in praise of the pavilion in the Bagh-i Jahanara in Akbarabad (Agra), written by Abu Talib Kalim, Shah Jahan's court poet. See *Diwan-i Abu Talib Kalim Kashani*, Persian edn P. Baiza'i (Teheran, 1336 sh./1957), p. 350.
72. Muhammad Waris, *Badshah Namah*, vol. III (Persian), British Library MS Add. 6,556, fol. 403/388 (Pers. pag.)
73. Kanbo, *'Amal-i Salih*, vol. III, p. 33.
74. See my 'Influence of the Jesuit Missions'.
75. Kanbo, *'Amal-i Salih*, vol. III, 1960, pp. 24–5. I thank Dr Christian Troll for his help in the translation of this difficult text.
76. Lahauri, *Badshah Namah*, I/I, p. 149, trans. Nur Baksh, *ASI, Ann. Rep.*, 1902–3, pp. 190–1. Cf. Kanbo, ibid., vol. I, 1958, p. 189, and Muhammad Abdullah Chaghtai, *Le Tadj Mahal d'Agra* (Brussels, 1938), pp. 34–5.
77. Rarely also one or two of the closest courtiers and the Prime Minister had access to the Shah Burj for secret conferences: Lahauri, *Badshah Namah*, pp. 150–3; Kanbo, *'Amal-i Salih*, vol. I, 1958, p. 190.
78. Rampur Library; see Percy Brown, *Indian Painting under the Mughals* AD *1550–1750* (Oxford, 1924), title-page.
79. R. Skelton, 'Indian Painting of the Mughal Period', in B.W. Robinson, ed., *Islamic Painting and the Arts of the Book* (London, 1976), pp. 259–60, colour plates 37, 127, identifies this throne with one made by Austin of Bordeaux for Jahangir in AD 1619 and points out its European elements. He does not, however, refer to its baluster columns. This European connection is a further support for my argument.
80. For representations of the Peacock Throne see Toby Falk, 'Rothschild Collection of Mughal Miniatures', B.W. Robinson (ed.), *Persian and Mughal Art* (London, 1976), p. 181, illus. p. 208. For a comparative study of description in European and Persian sources see Abdul Aziz, *Thrones, Tents and the Furniture used by the Indian Mughuls* (Lahore, n.d.), pp. 35–72. There is no mention there of the baluster columns shown in all pictures of the Peacock Throne.
81. Sir Thomas Roe, ambassador of James I at the Mughal court from AD 1615–19, also drew a European comparison in describing the appearance of the Emperor in this setting: 'This sitting out hath soe much affinitye with a theatre—the manner of the king in his gallery . . .', *The Embassy of Sir Thomas Roe to India, 1616–19*, ed. William Foster (London, 1926), p. 87. Compare also the numerous durbar scenes in painting, for instance Shah Jahan in durbar, page from a *Shah Jahan Namah*, *c.* 1650, fol. 50, Royal Library, Windsor Castle; illus. B. Gascoigne, *The Great Moghuls* (London, 1971), p. 145.

82. Kurz, 'Mughal Drawings', p. 262.
83. R. Ettinghausen, 'The Emperor's Choice', in Millard Meiss, ed., *De Artibus Opuscula XL: Essays in Honour of Erwin Panofsky* (New York, 1961), vol. I, pp. 98 ff. and *idem*, *Paintings of the Sultans and Emperors of India* (New Delhi, 1961), plates 11, 12, 13, 14.
84. Roe, *The Embassy*, p. 211.
85. 'Em hum quadro de hũa salla, mandou pintar ao natural o Papa o Emperador, el Rey Phelipe, & Dũq de Saboia, cujos retratos tinha, os quais todos estão de giolhos adorando a santa Cruz, quem está no meio delles, conforme a hum registro que disso tem'; Fernao Guerreiro, *Relaçam . . . V 1607–1608* (Lisbon, 1611), p. 14. See also Hosten, 'European Art', pp. 179–80: 'If the painting represented personages then alive (AD 1608), they must have been Pope Paul V (r. 1605–21), Rudolph II (r. 1576–1612), Philip III of Spain (and Portugal) (r. 1598–1621) and Charles Emmanuel I, surnamed the Great (r. 1562–1630)', p. 180, n.1.
86. The interest of the Mughals in European rulers is already clearly pronounced in Akbar who, for instance, wished to establish relations with Philip II of Spain(r. 1556–98) in view of a possible alliance against the Turk. See *The Commentary of Father Monserrate, S.J.*, trans. J.S. Hoyland, ann. S.N. Banerjee (Oxford, 1922), pp. 159, 163 f. Of particular interest in our context is his reasoning in his letter to the Spanish king about the common conditions of the princely station in AD 1582: 'Considering these things we are with the whole power of our mind earnestly striving to establish and strengthen the bonds of love, harmony and union among the people, but above all with the exalted group of rulers (*ta'ifa-i'alia-i muluk*) who enjoy the noblest of distinction in consequence of a greater share of divine favour, and especially with him who is the center of sultanate and the greatest of the caliphate and the recipient of spiritual illumination and life-giver to the Christian laws [*muhyi-i-marasim-i Isawi*, a direct allusion to the *pietas regia*?], who needs not to be praised or made known: and this decision is made on account of our propinquity, the claims whereof are well-established among mighty potentates and acknowledged to be the chief conditions of amicable relations.' See E. Rehatsek, 'A Letter of the Emperor Akbar asking for the Christian Scriptures', *Indian Antiquary*, vol. XVI, 1887, p. 138. For a short discussionof the editions of this letter see Maclagan, *Jesuits and the Great Mogul*, p. 44, n.57; Oleg Grabar, *The Formation of Islamic Art*, 1973 (London, 1978), pp. 45–8, discusses a comparable iconological subject in early Islam.
87. See n.95 infra.
88. Bury, 'Plateresque', p. 209.
89. Dürer discusses it briefly in the third book of his *Unterweysung*, cited in Forssmann, *Säule und Ornament*, p. 53.
90. Llewellyn, 'Baluster and Pomegranate', p. 294. For the meaning and use of the classical order in the architecture of the sixteenth century and later see

Forssmann, ibid., and *idem, Dorisch, Jonisch, Korinthisch, Studien über den Gebrauch der Säulenordnungen in der Architektur des 16.–18. Jahrhunderts* (Uppsala, 1961).

91. The pomegranate fruit (Span. *Granada*) was adopted as a new emblem for the province of Granada (Llewellyn, ibid., p. 297). 'Baluster' comes from Greek *balaustion*, Lat. *balausticum*, flower or unripe fruit of the pomegranate tree (Llewellyn, ibid., p. 295).
92. For a contemporary Spanish example see Earl Rosenthal, '*Plus ultra, Non plus ultra* and the columnar device of Emperor Charles V', *Journal of the Warburg and Courtauld Institutes*, vol. xxxiv, 1971, pp. 218, 223, plate 38b, fig. 6 below shows a woodcut made under Dürer's influence by Heinrich Vogtherr the Elder, who was also the author of a pattern-book, the *Kunstbuechlein*, 1537, which deals with baluster columns (see Forssmann, *Säule und Ornament*, pp. 51–2).
93. Rosenthal, ibid., pp. 227–8.
94. An important role in this argument was played by the Fourth Eclogue of Virgil, adapted as Messianic prophecy with its prognostication of the birth of a child who would inaugurate a new era of universal peace and restore the Age of Gold, epitomised in the return of Virgo-Astraea-Justice to earth. In this messianic interpretation, Charles V was saluted as the one Lord of the World who had induced the return of Astraea. For the use of the theme by the panegyrists of Queen Elizabeth I, see Frances A. Yates, *Astraea: The Imperial Theme in the Sixteenth Century* (London, 1975), esp. pp. 20–59, 127 ff.
95. Like most other elements of Mughal imperial symbolism of this time, it was introduced by Jahangir and used like the others, by Shah Jahan. See Ashok Kumar Das, 'Abu'l Hasan, Bichitr and the Iconographical [*sic*] Drawings', in his *Mughal Painting*, pp. 213–25. For the illustration of Jahangir with a globe whose European outlook is generally acknowledged, Das, ibid., p. 217; Kurz 'Mughal Drawings', p. 258, see Arnold and Wilkinson, *Chester Beatty Catalogue*, vol. I, pp. 29, 32, 35, 47; vol. III, plates 63, 86, all of which follow the scheme of the Emperor standing on a globe surrounded by attributes.
96. Yates, 'Astraea', plate 13.
97. This motif of peace among the animals (Isaiah II) features on the first title-page of the Antwerp Polyglot Bible (Rooses, *Christophe Plantin*, illus. after p. 136), a work of high importance, as we have seen, for the development of imperial symbolism at the Mughal court.

    The companionship of the lions with lambs, goats or oxen became the favourite symbol for the peaceful rule of the Mogul from Jahangir onwards. Cf. the inscription next to the globe with animals on the painting of Jahangir shooting Malik Ambar: 'Through the justice of Shah Nur al-Din Jahangir the lion has sipped milk from the teat of the goat' (Arnold and Wilkinson, *Chester Beatty Catalogue*, vol. I, p. 31; vol. III, plate 62). On this, and most of the painted globes mentioned in n. 95 supra, lions and sheep or oxen are depicted in peaceful coexistence. The motif of peace among the animals is also stated in Virgil's Fourth Eclogue, which was employed in the Golden Age propaganda

developed from Charles V. For the amalgamation of Virgil and Isaiah see Yates, 'Astraea', pp. 35 f. The Spanish Jesuits played an important part as transmitters of these ideas. They would have been assiduous in informing the Mughal emperors about their European counterparts to encourage the Mogul's own conversion to Christianity, the great aim of the mission. See my 'Influence of the Jesuit Mission'.

98. *Tuzuk-i Jahangiri*, vol. I, p. 7. For pictorial evidence see Arnold and Wilkinson, *Chester Beatty Catalogue*, vol. I, pp. 31–2, 47; vol. III, plates 62, 86; Gascoigne, *The Great Moguls*, illus. p. 145.
99. Kanbo *'Amal-i Salih*, vol. I, 1958, p. 192; my translation.
100. See for example W.G. Archer, *Indian Miniatures* (London, 1960), plates 86, 94.
101. For the use of Indian forms in British architecture after AD 1800 in general see most recently Patrick Connor, *Oriental Architecture in the West* (London, 1979), pp. 113 ff. Humphrey Repton's suggestions for Indian pillars include a slender elongated form of baluster column, close to the type discussed as precursors for Shah Jahan's column. See his *Designs for the Pavilion at Brighton* (London, 1808), p. 31; and illustrations of 'The West Front of the Pavilion' and 'Designs for an Orangerie'. John Nash's free interpretation of this motif on the façades of the Royal Pavilion seems to follow Repton's recommendation to use Indian forms 'with such combinations or even occasional deviations and improvements, as the general character and principle of the construction will admit' (Repton, ibid., p. 31). For illustrations, see Connor, ibid., plates 109, 116. A truer representation of the historical form is evident at the beginning of the twentieth century. The reconstruction of the Church Street façade of the former Royal Stables and Riding Hall in Brighton features faithful copies of the Mughal baluster column (fig. 10 below).

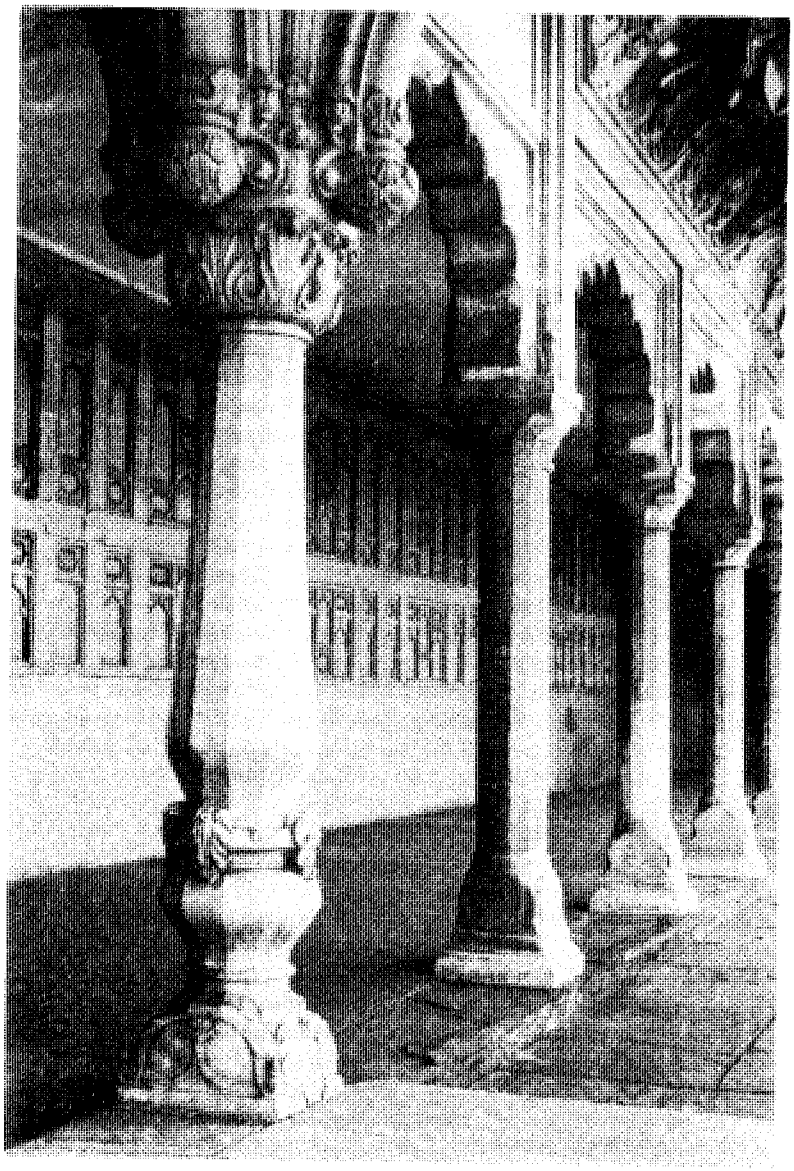


Fig. 1. Agra Fort, Machchhi Bhawan, completed 1637, detail of baldachin originally housing Shah Jahan's golden throne.
Photo: E. Koch

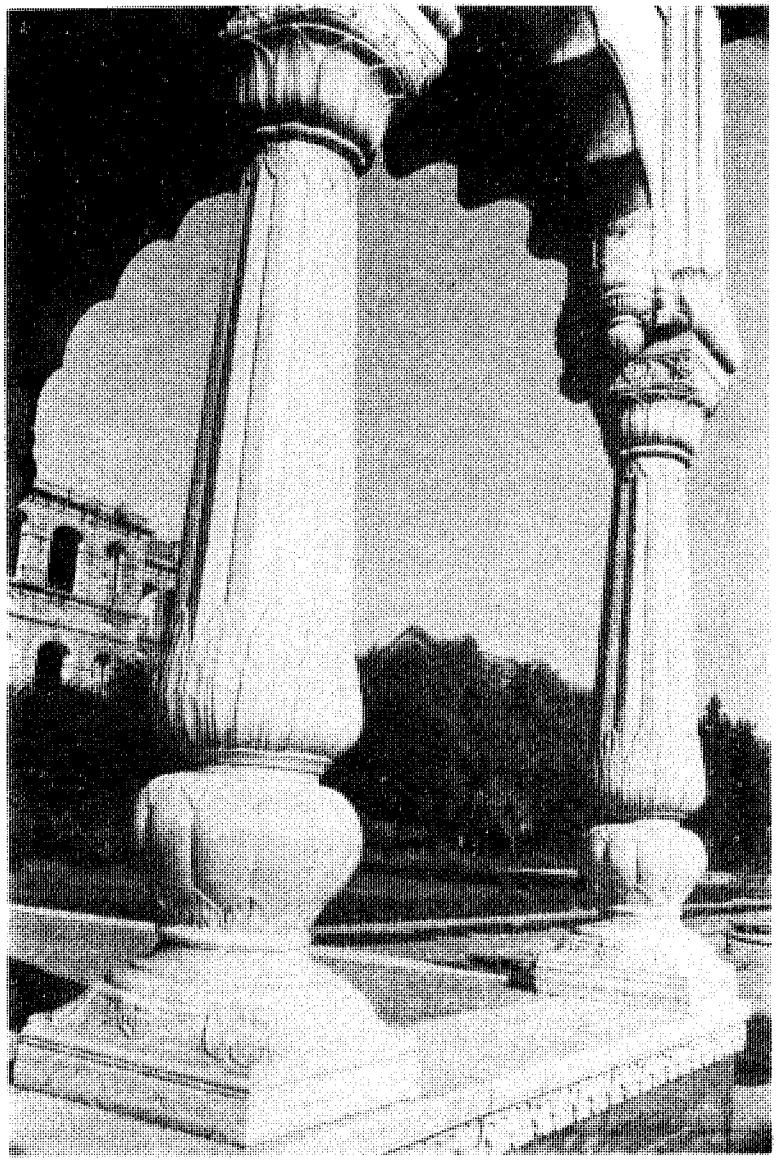


Fig. 2. Red Fort, Delhi, 1638–48, column of Bhadon pavilion.
Photo: E. Koch

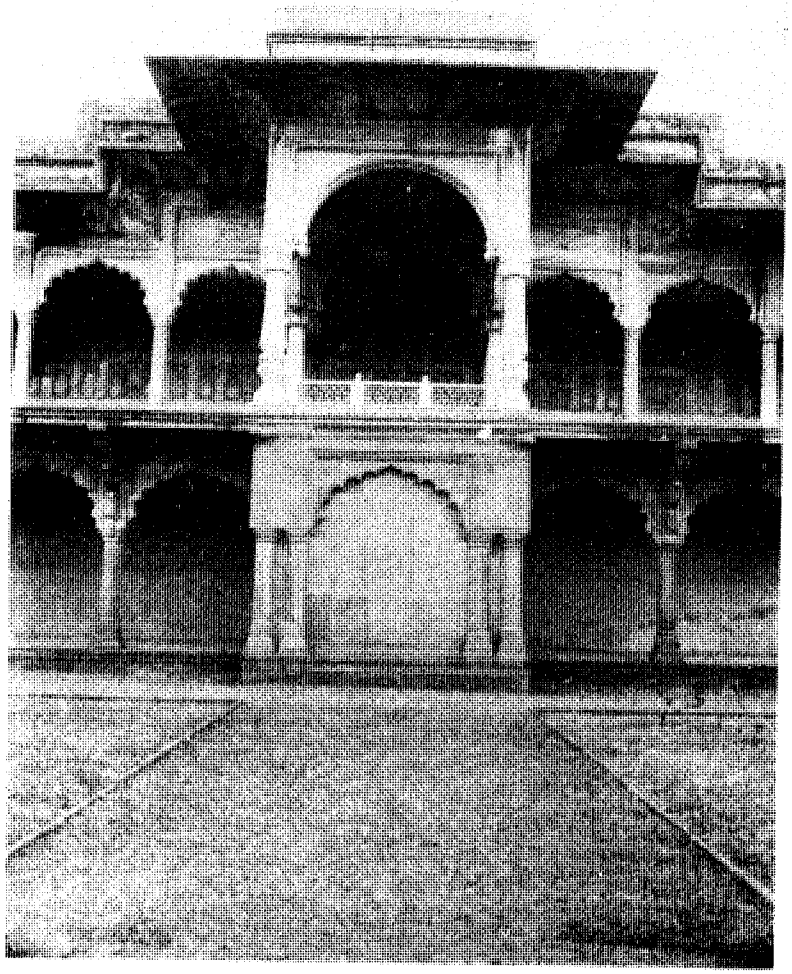


Fig. 3. Agra Fort, Machchhi Bhawan, completed 1637, baldachin.
Photo: E. Koch

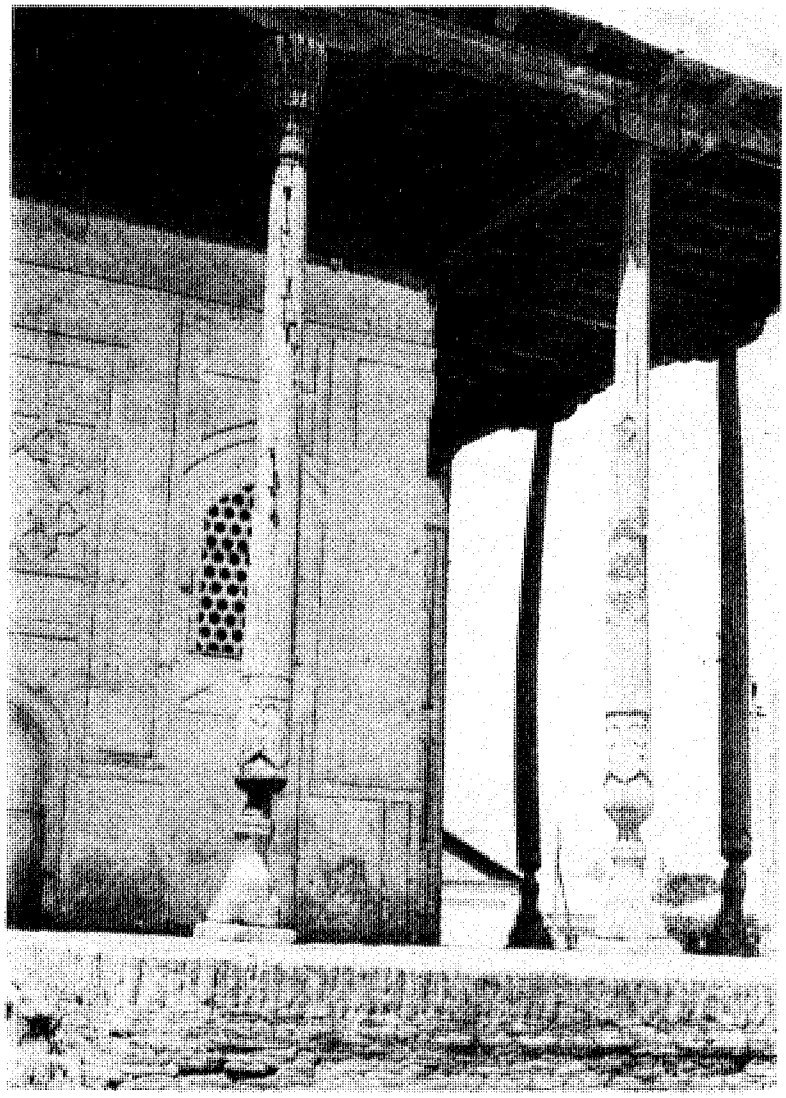


Fig. 4. Balijand mosque, Bukhara, 16th century (columns remodelled after the originals).
Photo: E. Koch

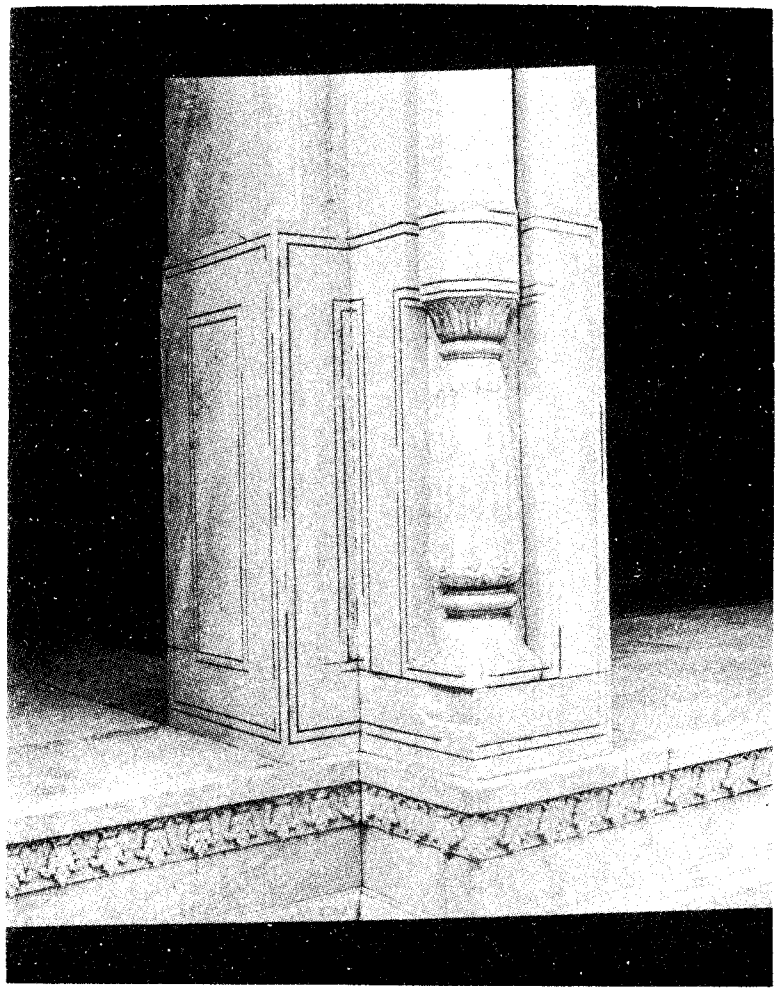


Fig. 5. Lahore Fort, Moti Masjid, attributed to Shah Jahan's reign, 1628–58, engaged colonnette, prayer hall.
Photo: E. Koch



G.1442 Coat of Arms of Emperor Charles V (699 x 489) c. 1542 *Berlin*

Fig. 6. Heinrich Vogtherr the Elder, Coat of arms of Emperor Charles V, *c.* 1542.
Photo: E. Koch

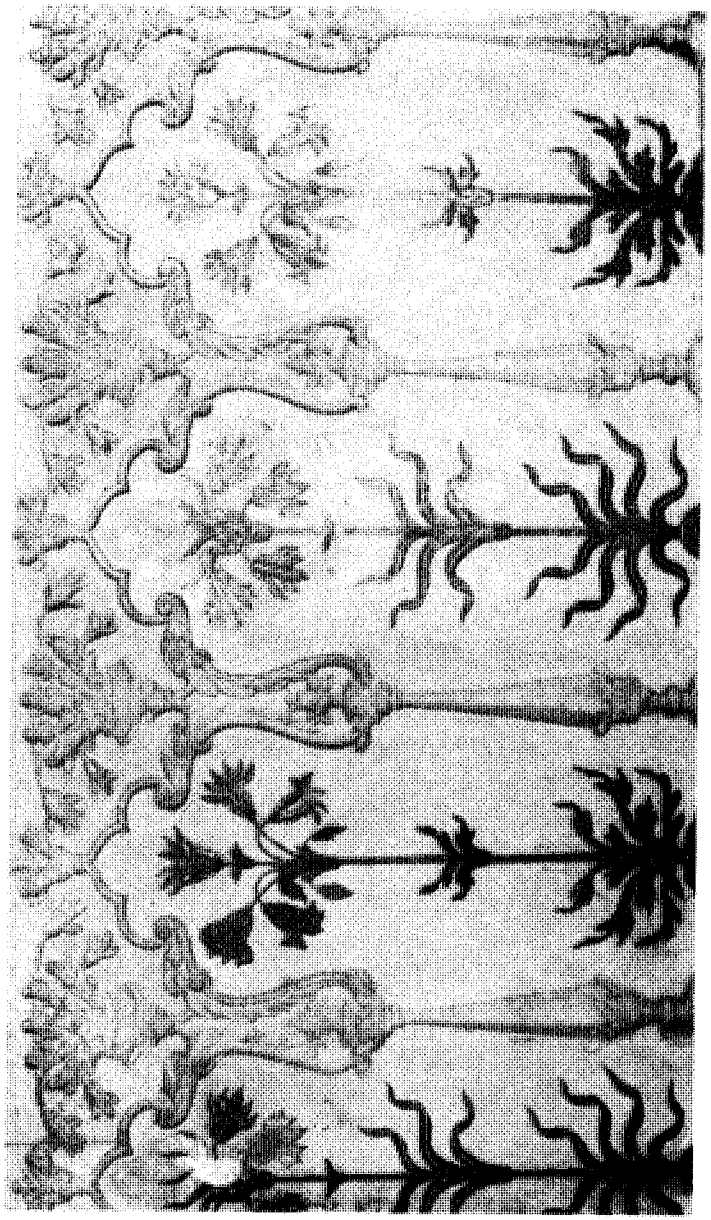


Fig.7. Diwan-i-Amm, Agra Fort, completed 1637, wall relief in the loggia of the jharoka. Photo: E. Koch


Carl der fünfft von gottes gnaden Römischer Kayß
er zů allen zeiten merer des Reichs in Germanien
Zů Hispanien / Baider Sicilien / Jherusalem /
Vngern vnd Behem / Dalmatien / Croatien
ꝛc. Kung Ertz Hertzog zů österreich / Hertzog zů
Burgundi Brabannt ꝛc.

Fig. 8. Christoph Amberger, Emperor Charles V, 1530.



Fig. 9. Albrecht Dürer, car from the *Triumph of Maximilian I*, 1526.

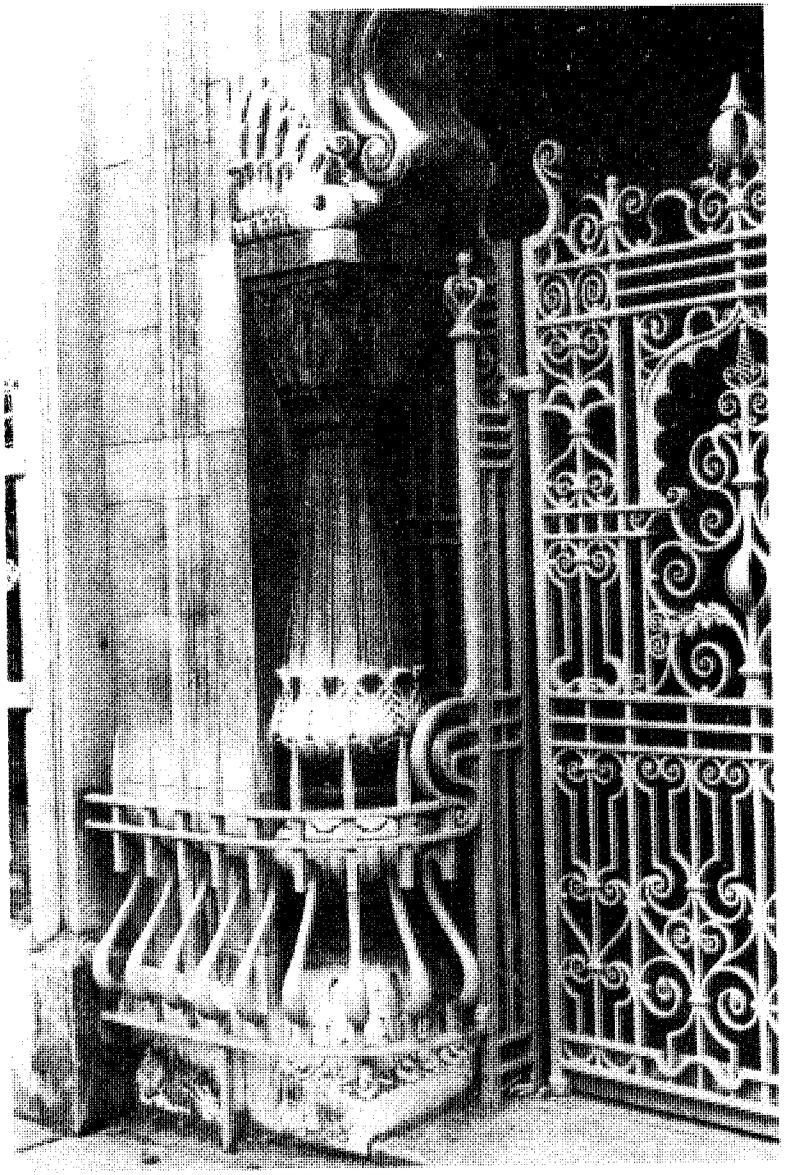


Fig. 10. Royal stables and riding hall, Brighton, 1901–2, archway in the façade

Photo: E. Koch

CHAPTER II.4

New Light on the History of Two Early Mughal Monuments of Bayana*

IQTIDAR ALAM KHAN



The following pages introduce a so-far-unnoticed building erected by one of Humayun's nobles in the fort of Vijayamandirgarh, near Bayana,[1] and offer brief comments on the various implications furnished by its dated inscription. The building containing this inscription is located at a lonely spot inside the fort, a short distance from the eastern edge of the ridge, along which the rampart of Vijayamandirgarh stretches in a northsouth direction on the eastern side and overlooks a broad expanse of the countryside below.

The building is a double-storeyed pavilion supported by twenty-four rectangular pillars on the ground floor and by eight pillars on the first floor. In this part of the fort, the only other notable buildings are rooms and galleries guarding the Sikandra Gate and a ruined structure, of which only two adjacent rectangular rooms now remain, located in an east–west direction inside an enclosure immediately to the north of the Sikandra Gate. The last-mentioned structure is popularly identified as the tomb of Shaikh Phul, whose real name was Shaikh Buhlul.[2]

It is possible to identify the building containing the inscription I discovered as the one built by the *bakhshī* (paymaster) Muhammad during Humayun's reign, on the strength of a passage in the *Tuzak-i Jahāngīrī*. In this passage, Jahangir records his visit to Vijayamandirgarh in

*First published in *Muqarnas*, vol. 6, 1990, pp. 75–82.

AD 1617–18 and mentions having seen 'the *manzil* built by Muhammad, the *bakhshī* of Janat Ashyani, who was entrusted with the charge of the fort.' Regarding this *manzil*, Jahangir further records that it 'overlooked the plain (*musharraf bar ṣaḥrā*), was greatly elevated (*baghāyat murtaf'i*) and airy (*khush hawā*). The tomb of Shaikh Buhlul is also in the neighbourhood (*jawār*), and is not wanting in excellence.[3] Here, one might point out, Jahangir's mention of Shaikh Buhlul's tomb and his further remarks identifying Shaikh Buhlul as the elder brother of Shaikh Ghaus of Gwalior are crucial to this identification.

The building is set on the top of the hill. A solid foundation provides a level platform for the superstructure which is built with red sandstone in a post-and-lintel system. The main floor is arranged on an irregular grid pattern with six pillars on the longer and four pillars on the shorter side. Three bays in the central area are walled up and thus form a closed block which is surrounded by an ambulatory verandah. On the western side of the central block is a stairway which leads to the top floor. The walls of the inner chamber are pierced by seven doors. The room is divided into two bays in a ratio of 1:2 by two additional pillars projecting from the walls. The top floor of the building consists of a flat-roofed gallery made of eight pillars arranged in two parallel lines of four each.

An examination of the room on the main floor revealed the remains of Persian inscriptions on the beams supporting the ceiling of its western bay. Of these, the inscriptions on the northern and southern beams have peeled off and are not decipherable. But fortunately all the four verses of a *qit'a-band* inscribed on the beam dividing the western bay of the room from the eastern bay have remained undamaged. At the time of my first visit to this building in February 1985, even these lines were almost entirely hidden from view by sparrow nests and other deposits. That should, perhaps, explain why the epigraphists failed to notice them until now. It was only possible to take the impression of this inscription and to photograph it after it had been cleaned with the help of the technical personnel from the Centre of Advanced Study in History at Aligarh Muslim University, who accompanied me on my trip to Bayana in April 1986.[4]

Each set of two consecutive verses of the *qit'a-band* of this inscription are written on a separate line which is placed within a rectangular frame measuring 1.85 x 0.50 m. The full text of the inscription is spread over two parallel horizontal lines of equal length. The verses are set off from each other by framing cartouches with lobed extremities. The entire inscription is written in a style that might be characterised as an early

specimen of Indian *nasta 'liq* which appears to bear the stamp of the sixteenth-century *dīwanī* style. The manner in which the *sin* is written in the first verse of the *qit'a-band* illustrates the imprint of the contemporary *dīwanī* style on the *nasta 'liq* used in this inscription. It appears that we have here one of the earliest, or perhaps the earliest, *nasta 'liq* inscription in the whole of the subcontinent.

The *qit'a-band* of this inscription carries a chronogram (*māninda-i qaṣr-i qaiṣar*) yielding the year AH 940 (AD 1533–4) as the one during which the building was erected. The same number is also recorded in digits inscribed just below the second-to-last word of the fourth verse. There is also a reference, in the second verse of the *qit'a-band*, to Humayun as the reigning king.

The full text of the inscription and its English translation will be followed by a commentary on the implications of the information furnished by the inscription. Deciphering the text of the inscription was possible only through a careful comparison of photographs with the facsimile. (I should here also like to acknowledge most gratefully the guidance received from Professor Nazir Ahmad.) It reads:

ay qaṣr-i jinān ki khaus gashta samar
dar 'ahd-i Humāyūn shāh-i farkhunda siyar
māninda qaṣr-i qaiṣari zi ān rū shud
tārīkh tu'māninda qaṣr-i qaiṣar

Translation:

O paradise-like palace, [even] Samar
[the mythical founder of Samarqand]
was deceived [by your elegance].
[This happened] during the reign of
Humayun, the king of fortunate disposition.
[You] resemble Caesar's palace
[and] thus the date of [your] building
[would be] '*māninda-i qaṣr-i qaiṣar*'
(resembling Caesar's palace) 940.

From this it is evident that the building was erected in AH 940 (23 July 1533–12 July 1534), by someone who did not claim royal status. This is borne out by the clear hesitation of the composer of the *qit'a-band* to describe it as a royal building (*qaṣr-i qaiṣari*, 'Caesar's Palace'). While praising the building, he takes care to use a somewhat less pretentious expression, namely *māninda-i qaṣr-i qaiṣar*, 'resembling

Caesar's palace'. Moreover, the specific reference in the second verse of the *qit'a-band* to Humayun as the reigning king indicates that both the composer and the person for whom the inscription was composed considered themselves subjects of Humayun. These inferences further strengthen my assumption that the building which contains this inscription is the same as the *manzil* built, according to Jahangir, by one of Humayun's nobles.

Once it has been established that the building was erected in AH 940 (AD 1533–4) by one of Humayun's nobles, its resemblance to Akbar's famous Panch Mahal at Fathpur Sikri becomes significant. Even a cursory glance shows that in the basic conception of its design and in the use of particular architectural devices this building, notwithstanding its small size and comparatively poor workmanship, can be regarded as a precursor of the famous Panch Mahal and other buildings of the Fathpur Sikri complex showing the so-called Hindu or Rajput influence. Like the Panch Mahal, this building is also conceived as a multistoreyed pavilion supported on stone pillars. As already noted, the number of pillars on the ground floor is twenty-four, arranged in four parallel lines of six pillars each. The pillars on the first floor number only eight and are arranged in two parallel lines of four each. The structure of this pavilion rising from the plinth-level platform diminishes in size on the first floor to about one-sixth of what its area is on the ground floor, but the ratio between covered and open spaces on the two floors remains nearly constant. Again, major parts of the open spaces on both floors are on the same side of the pillared structures, and this tends to heighten the visual effect created by the receding storeys.

In all these respects, the design of this building bears a strong resemblance to that of the Panch Mahal, each successive storey of which is smaller than the one on which it stands. Similarly, the technique used in the Panch Mahal of supporting the roof on 'the stone beams resting upon the four-armed moulded brackets projecting above the enriched capitals of the various columns'[5] is discernible in the pillared chamber on the ground floor of this building of Humayun's reign. The credit for adopting a new pavilion design 'akin to the plan of a Buddhist *vihāra*' in Mughal architecture should clearly go, not to Akbar, but to his less illustrious father Humayun.[6]

The inscription also suggests interesting insights into the associations and career of the officer in charge of the *sarkār* Bayana, with Vijayamandirgarh as its military headquarters, between AD 1533 and 1539.

This inscription, read along with Jahangir's passage, testifies that a certain officer, Muhammad the *bakhshī*, was already in charge of Bayana in AD 1533–4. He was apparently the same person as Muhammad Sultan, the *bakhshī* whom Babur mentions as serving in the left wing of his army in the Battle of Panipat. At Khanwa, he is mentioned as serving on Babur's personal staff. In this capacity we see him conveying the commands of the king to the officers, leading various wings of the army. Until December 1528, Muhammad Sultan occupied a residence at Agra which, according to Babur's description, was located on the left bank of the Yamuna. It was in this house that Muhammad Sultan played host to Babur on 13 December 1528. During Babur's eastern expedition in AD 1529, Muhammad Sultan was stationed somewhere near Chunar.[7]

It is not known exactly when Muhammad Sultan was appointed to Bayana. But if one assumes that the pavilion which he erected inside Vijayamandirgarh would have taken one or two months to complete, then in the light of the date of AH 940 (AD 1533–4) for the completion of that building yielded by its inscription, one may infer that Muhammad Sultan was already in charge of Bayana by the end of AD 1533. This inference is confirmed by Gulbadan's observation that until the end of 1533, when Muhammad Zaman Mirza escaped from the Bayana fort, that place was under the charge of Yadgar Taghai.[8] It is justifiable to assume that Muhammad Sultan was sent to replace Yadgar Taghai immediately after Muhammad Zaman Mirza's escape in December 1533.

It further appears from Jahangir's reference to Muhammad Sultan that he was still in charge of Bayana in AD 1539 when Mirza Hindal executed Shaikh Buhlul at Agra on the insistence of some disgruntled nobles.[9] From the same passage, one can also deduce that Humayun had left Muhammad Sultan at Agra on his way to Bengal in AD 1537. Apparently, he was expected to cooperate with the other officers stationed there in maintaining law and order and also to supervise the supply of funds and war equipment to the imperial camp in the east. Abu'l Fazl tells us that when Humayun faced Sher Khan at Chausa in AD 1539, Muhammad Sultan readily cooperated with other officers at Agra in raising funds and war equipment for him. Those efforts were supervised by Shaikh Buhlul, who had been sent by Humayun to Agra around this time to advise Mirza Hindal and to keep him firm in his allegiance to the king.[10] As is well known, this situation was radically altered after Mirza Hindal proclaimed himself king and, to underline further his defiance of Humayun's authority, put Buhlul, the king's personal representative, to death.

Jahangir's statement that Muhammad Sultan was a disciple of Shaikh Buhlul is partly corroborated by Abu'l Fazl. According to Abu'l Fazl's version, he was grief-stricken over Shaikh Buhlul's violent death. He is reported to have told Mirza Hindal, 'You have killed the shaikh, why do you delay about me?'[11] This would also lend credence to Jahangir's statement about Shaikh Buhlul's dead body being brought to Bayana by Muhammad Sultan and his burial in the vicinity of the *manzil* built by Muhammad inside the fort. But at the same time it is obvious that the tomb of Shaikh Buhlul could not possibly have been built by Muhammad Sultan. It is well known that the Mughals were ousted from the Agra–Bayana region within a few months of Shaikh Buhlul's execution. Muhammad Sultan would have hardly had the opportunity to build a tomb over the grave of his preceptor. It can be assumed that this tomb was built some time during the early years of Akbar's reign, when for a short while Shaikh Buhlul's younger brother Shaikh Muhammad Ghaus of Gwalior became influential at Akbar's court.[12]

To recapitulate briefly the four major points about the history of the two Mughal monuments located inside the Bayana fort and one minor point about the history of Bayana *sarkār* under Humayun that have been established by the archaeological and textual evidence presented here: first, the building standing inside Vijayamandirgarh to the north of its Sikandra Gate where I discovered the hitherto overlooked inscription dated AD 940 (AD 1533–4) is the same building that Jahangir visited in AD 1617–18 and which he ascribes to Humayun's *bakhshī*, Muhammad Sultan. Second, the tomb located in the immediate vicinity of the Sikandra Gate of Vijayamandirgarh to the north in all probability contains the grave of Shaikh Buhlul (also known as Shaikh Phul), the elder brother of the famous Shattari saint Shaikh Muhammad Ghaus of Gwalior. Third, the building identified by me and Ebba Koch as the pavilion built by Humayun's noble the *bakhshī* Muhammad Sultan was, in the basic conception of its design, a forerunner of Akbar's famous Panch Mahal at Fathpur Sikri. Fourth, the tomb of Shaikh Buhlul inside the Vijayamandirgarh was possibly built some time during the early years of Akbar's reign. Finally, the *bakshi*, Muhammad Sultan, a noble of high standing and a disciple of Shaikh Buhlul, was appointed by Humayun as the commandant of Bayana after the removal of Yadgar Taghai towards the end of AD 1533, and he continued to hold that position until AD 1539.

Notes and References

1. Bayana, situated 26°55'N and 77°18'E, near the left bank of Ghambir, is a subdivisional headquarters in the Bharatpur district of Rajasthan; K.D. Erskine, comp., *Imperial Gazetteer of India, Provincial Series, Rajputana* (Calcutta, 1906), p. 335 and K.K. Sehgal, ed., *Rajasthan District Gazetteers: Bharatpur* (Jaipur, 1971), p. 476. For a brief history and description of Vijayamandirgarh (also known as Bijaigarh) see A. Cunningham, *Archaeological Survey of India, Report 1882–8*, vol. 20, p. 62. The inscription introduced here is not mentioned in Z.A. Desai, *Published Muslim Inscriptions of Rajasthan* (Jaipur, 1971), which also contains a list of Muslim inscriptions of Bayana.
2. Shaikh Buhlul, elder brother of the well-known Sufi of the Shattari order, Shaikh Muhammad Ghaus of Gwalior, was also called Shaikh Phul, which was apparently a nickname. See Ghausi Shattari, *Gulzār-i Abrār*, compiled between 1602 and 1613, Ms. no. 115 (collected in AD 1667–8), John Rylands Library, Manchester, where he is referred to by both names (see fol. 161a). Popular identification of this building as Shaikh Buhlul's tomb is borne out by recent Devanagari graffiti on its walls. One of them reads: *samādhī Bābā Phūl Singh*. Another reads: *samādhī Shaikh Phūl Singh*. From these graffiti, it is evident that in the minds of the local people this building has been associated with some 'Baba Phul' down to the present day. So far as I know, the first published reference to this oral tradition is a footnote by H. Beveridge to A. Roger's translation of *Tuzak-i Jahāngīrī*, rpt. (New Delhi, 1978), p. 63, where he states that at the time of writing, i.e., sometime between 1909 and 1914, Shaikh Buhlul's tomb still existed inside the Bayana fort.
3. *Tuzak-i Jahāngīrī*, ed. Saiyid Ahmad Khan (Ghazipur and Aligarh, 1863–4), p. 258. My attention was drawn to this passage by Ebba Koch. For an earlier reference to the same passage in the context of Shaikh Phul's violent death and his burial at Bayana, see Robert Skelton in Rai Krishnadas Felicitation Volume, *Chhavi 2* (Varanasi, 1981), p. 127.
4. In February 1985 when this inscription was first located, I was accompanied by Ravindra Kumar of the Maharaja Sayajirao University of Baroda and by my colleagues at the Centre of Advanced Study in History, Bhanwar Bhadani, Saeedul Hasan, Nasir Husain Zaidi, and Khursheed Beg. In April 1986 with me were Iqbal Ghani Khan, Saeedul Hasan, Zameer Ahmad, and Irfan Khan of the Centre.
5. For these features of the Panch Mahal, see E.W. Smith, *The Mughal Architecture of Fathpur Sikri, Part 1* (Allahabad, 1894), pp. 14, 21; also E.B. Havell, *Indian Architecture* (London, 1913), pp. 172–3.
6. The resemblance of the Panch Mahal to the plan of a Buddhist *vihāra* is suggested by Smith, *The Mughal Architecture of Fathpur Sikri, Part 1*, p. 14. Ebba Koch has shown in her paper, 'The Architectural Forms', in Michael Brand and Glenn D. Lowry, ed., *Fatehpur-Sikri* (Bombay, 1987), p. 131, that pavilions constructed with receding storeys in a post-and-lintel system can already be found in pre-Mughal Indian Islamic architecture. She gives as an example the three-storeyed pavilions in the fort of Khimlassa, Madhya Pradesh, which she dates to the fifteenth century.
7. Muhammad the *bakhshī's* identification with Muhammad Sultan, the *bakhshī* of Babur, is suggested by H. Beveridge in a footnote to the English translation of a passage in the *Akbarnama* where Abu'l Fazl also refers to 'Muhammad the *bakhshī*' and mentions that in AD 1539 he collaborated with Shaikh Buhlul at Agra in collecting money and arms for Humayun, then facing Sher Khan at Chausa. Cf. H. Beveridge, trans., *Akbarnama*, vol. 1 rpts. (Delhi, 1972), p. 339, n. 2. Muhammad Sultan's career up to AD 1529 can be traced with the help of references in the *Baburnama*, translated from the original Turki text by A.S. Beveridge, rpt. (London, 1969), pp. 472, 568, 629, 653–4.
8. *Humayun Nama*, ed. and trans. Beveridge (London, 1902), p. 29.
9. Jahangir says: 'As Muhammad the *bakhshī* was bound to the aforementioned shaikh by [being his] disciple (*nisbat-i-irādat*), he carried the dead body to the fort of Bayana and buried it there.' *Tuzak-i Jahāngīrī*, p. 258.
10. *Akbarnama*, vol. 1, ed. Agha Ahmad Ali (Calcutta, 1873–86), p. 156.
11. Ibid.
12. According to Ghausi Shattari, around the time when Mirza Hindal proclaimed himself the king of Agra, he directed Sultan Mirak, the *hawāladār* of Gwalior to bring Shaikh Muhammad Ghaus to Agra. But the shaikh came to know of this order in time and promptly went into hiding. Later on his children also fled and hid in the ravines. His house was plundered by the *hawāladār*'s troops. Shaikh Muhammad could return to Gwalior only after Mirza Hindal had submitted to Humayun. After Humayun's expulsion from Hindustan, Shaikh Muhammad Ghaus was forced to leave Gwalior again. This time he took shelter in Gujarat. He continued to stay there as long as the Surs ruled over the Agra–Delhi region. Ghausi Shattari quoted from one of the letters Humayun wrote to Shaikh Muhammad Ghaus during the latter's stay in Gujarat, to demonstrate Humayun's high esteem for the shaikh; see Shattari, *Gulzār-i Abrār*, fols. 161a, 187b–188a. For evidence that in his youth Akbar had enrolled himself as a disciple of Shaikh Muhammad Ghaus, see 'Abdal Qadir Badauni, *Muntakhab at-Tawarikh*, vol. 3, ed. Ahmad Ali, Kabir al-Din Ahmad, and W.N. Lees (Calcutta, 1865), p. 5.

CHAPTER II.5

The Architecture of Raja Man Singh: A Study of Sub-Imperial Patronage*

CATHERINE B. ASHER



The role of neither patron nor artist is well understood in pre-modern Indian art. We have occasional but rare references to the names of artists prior to the Mughal period, but certainly not enough to provide any significant insight into their role as creative figures. References to the patron are more common, especially with the establishment of the Mughal court. Meaningful information on Mughal artists and architects still remains scanty, but for both the monarch and his nobles, the monuments and written records together develop a picture of the patron's role. Most attention has been focused on the role of the Mughal emperor as patron, but there has been no work on the complex role of a patron other than the emperor, nowhere better illustrated than with the patronage of Raja Man Singh. As this study shows, he simultaneously served his own interests and those of the emperor, and as he did so was pivotally important in establishing a Mughal aesthetic across the realm.

A contemporary poet called Raja Man Singh the maintainer of Akbar's prestige,[1] doubtless alluding in part to his role in spreading imperial Mughal taste. He was head of the Kachhwaha Rajput house and at the same time one of the highest-ranking *amīr*s in the court of the Mughal emperor Akbar (AD 1556–1605). Man Singh was also an extraordinarily productive patron of architecture, providing works spread

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across Akbar's domain, from the Punjab to Bengal.[2] Since Man Singh was a raja in his own right, yet at the same time one of the highest-ranking grandees of the Mughal court, it is pertinent to consider whose prestige Raja Man Singh was advancing in constructing expensive and immovable edifices across Mughal territory. Was Raja Man Singh functioning as Akbar's agent or serving as patron on his own behalf? Or was the patronage, as I propose here, indicative of a complex relationship between the emperor and his raja? While the Mughal emperor was the highest authority, his power depended on carefully balanced and constantly fluctuating relationships with his own nobles and local rulers, be they Muslim or Hindu.

Man Singh, born in AD 1550, belonged to the Kachhwaha Rajput clan, the first princely house of Rajasthan to join the Mughal ranks and give their daughters in marriage to Mughal princes and emperors.[3] Thus Man Singh and his father, Raja Bhagwant Das, became constant companions of Akbar. Akbar developed a deep affection for young Man Singh, bestowing upon him the title *farzand* (son).[4] Man Singh served Akbar well, leading military campaigns against the more recalcitrant Rajputs of Mewar, and also playing major roles in expeditions to the Punjab, Kabul, Bihar, Bengal, and Gujarat. In AD 1585, Man Singh was appointed governor of Kabul; and two years later, he was made governor of Bihar.[5] In AD 1589, after the death of Man Singh's father, Akbar granted Man Singh the title 'Raja' as well as a rank of 5,000, the highest *manṣab* (rank) awarded at that time.[6]

Until Man Singh succeeded to the *gaddī* (throne) of the Kachhwaha house of Amber, his patronage appears limited. He and his father provided funds for a mosque in Lahore.[7] Man Singh also probably constructed a fort in AD 1587 near Ohand on the Indus; it is likely that this was a mud fort built on the great earth mound mentioned by Abu'l Fazl.[8] He also repaired the fort at Sialkot during his tenure as governor of Kabul.[9] The repair and construction of both these forts may be viewed as military maintenance routine for any governor. Besides these, Man Singh built a garden with pleasure pavilions at Hasan Abdal, today just west of Rawalpindi.[10] But once Man Singh became the Kachhwaha Raja, the nature and scope of his patronage changed considerably, a direct reflection of his new status and wealth.

Raja Man Singh's first major work was the Govind Deva Temple in Brindavan, dated to Akbar's thirty-fourth regnal year, AD 1590.[11] The location of the three dedicatory epigraphs, on the temple's lower walls, indicates that these record the commencement of construction, not its

completion. This notion is further underscored by a statement in the *Jahangīr Nāma* that the Govind Deva Temple was never completed.[12] Indeed, the lack of any *śikara* suggests that the superstructure remains incomplete.[13]

Man Singh's patronage of the Govind Deva Temple is notable for several reasons. First and most obvious is the size of the temple, nearly 80 metres in length, by far the largest temple constructed in north India since the thirteenth century. It is also the largest of the four temples built in Brindavan during the reigns of Akbar and Jahangir.[14] They underscore common knowledge that Hinduism flourished in the reigns of Akbar and Jahangir. Brindavan, traditionally associated with the childhood of Krishna and hence long a pilgrimage site, gained renewed importance in the sixteenth century under the influence of the newly founded Chaitanya sect, which advocated complete devotion to Krishna. Akbar, though a Muslim, recognised the spiritual importance that Brindavan held for Hindus. In AD 1563 he rescinded the practice of taxing pilgrims who visited *tīrthas* (holy spots).[15] Legend even attributes to Akbar profound spiritual empathy with the place, for he is said to have entered a trance when he visited Brindavan.[16] Thus Brindavan, a long-standing Hindu *tīrtha*, was an appropriate site for the construction of major temples by the Kachhwahas and other Rajputs who served under the Mughals.[17]

The Govind Deva Temple's plan is cruciform, recalling similar plans utilised for eleventh-century structures at Khajuraho and Kodhera.[18] Continuous horizontal mouldings cover the entire elevation of the Govind Deva's exterior, broken only by pillared apertures on the ground floor and bracketed and pillared oriel windows on the upper level, each allowing the entry of light. The absence of sculpture on the temple's exterior is in keeping with many other temples, for example Raja Bhagwant Das's slightly earlier temple at nearby Govardhan or the Ambikeshwara Temple, founded by an eleventh-century Kachhwaha ruler, in Amber.[19] The Govind Deva Temple's exterior, composed entirely of dressed Sikri sandstone, reflects general trends of its time, particularly in its brackets and pillars. The temple's arcuated, domed, and vaulted interior corridors flanked by elaborate bracketed pillars (Fig. 1), however, reveal specifically an awareness of the imperial Mughal tradition.[20]

Temples exhibiting features commonly associated with Muslim constructed architecture do not originate with Raja Man Singh. For example, temples with domes are depicted in the AD 1516 *Araṇyakaparvan* and in the ca. 1560 *Ṭūṭī Nāma*,[21] also Raja Bhagwant Das' Hari Deva Temple

at Govardhan uses arcuated forms, albeit timidly. However, on Raja Man Singh's Govind Deva Temple, net squinches, domes, intersecting vaults, and lengthy barrel vaults are used to create a sense of open space hitherto unprecedented in Akbari architecture. In other words, the Govind Deva Temple does not merely reflect Mughal tradition, but in many ways anticipates trends yet to develop in imperial Mughal architecture. In this manner, Raja Man Singh can be said to be an innovator of Mughal taste, not simply an imitator. The temple he provided was so highly regarded that 'Abdu'l Latif, who travelled across the subcontinent in the early seventeenth century, expressed the wish that it were a mosque, not a temple.[22]

Large-scale temple construction on the part of Raja Man Singh was not limited to Brindavan, for he also built a sizeable temple in Benares. Although his Benares temple was largely destroyed in the late seventeenth century, remains suggest that the temple's builders adopted forms elsewhere used in Mughal architecture.[23] Similarly, the temples constructed by Raja Man Singh at Rohtas, Baikatpur and Amber as well, discussed later, can be viewed as creative reflections of the imperial Mughal aesthetic.

Mughal influence on all Raja Man Singh's architectural output is hardly surprising. Since the age of twelve, Raja Man Singh had been raised in the close presence of Akbar and the imperial court. In fact, it was this close contact between emperor and nobles, who were bound in loyalty to the ruler, the head of an intricately run state, that encouraged uniformity in all things—from administration including the running of *jāgīrs* (land producing revenue assigned to the noble) to the institution of a uniform aesthetic.

A sense of Raja Man Singh's motivation as a patron of temples may be derived from an examination of the written evidence associated with three structures and the traditions that are preserved orally. Although the three dedicatory inscriptions of the Govind Deva Temple do not specify any reason for its construction, they all, however, stress Raja Man Singh's Kachhwaha lineage. Commemoration of Man Singh's family is also implied in the written documentation for other temples he built.

Among these other temples is one dedicated to Gauri-Shankar at Baikatpur, about 30 kilometres east of Patna on the south bank of Ganges.[24] Preserved *parwānas* (decrees) now in the Patna High Court leave no doubt that Raja Man Singh was the patron.[25] Long-standing tradition suggests that Man Singh built the temple to memorialise his

recently deceased mother and commemorate a victory.[26] As a result of a dream, Raja Man Singh is said to have discovered the amulet that had protected the demon-king of Magadha, Jarāsandha, against defeat by any mortal;[27] when Jarāsandha lost this amulet, he could be killed by Bhima, reminded by Krishna of his powerful warrior lineage. Man Singh, who shared with the legendary Bhima a comparable warrior lineage, vowed to build a temple for the amulet if he were successful in defeating rebel forces in Bengal. The temple at Baikatpur is the one he built; its main image, an unusual form of Gauri-Shankar, is claimed to be Jarāsandha's amulet. This particular site was selected because here at Baikatpur, Man Singh's mother had recently been cremated. The temple likely was dedicated on 21 December 1600, for at that time, Man Singh issued a *parwāna* providing land and income for the temple's support.[28] A Brahmin family whose descendants still maintain the temple were brought from Amber, the Kachhwaha ancestral domain.

Thus a temple intended to propitiate his family's name and associated with victory was constructed by Raja Man Singh. Documents related to the temple's upkeep reveal that Man Singh's successors and later the Mughal emperors and governors of Bihar continued to provide for the temple's welfare.[29] Thus, it is as if the monument had state significance, not only importance for the Kachhwahas.

The Baikatpur temple's style, although much simpler than that of the Brindavan Govind Deva Temple, reflects the artistic vocabulary of contemporary monuments. The temple's exterior, like that of the Govind Deva Temple, is marked by continuous horizontal mouldings from the plinth to the *śikara*, while the *maṇḍapa* is domed. Paintings around the base of the dome's interior, executed in late sixteenth-century Mughal style but now largely effaced, appear to represent both Saiva and Ramayana themes.

A visually more sophisticated structure, the Jagat Śiromaṇi Temple in Amber (Fig. 2), the Kachhwaha seat, is based on the artistic traditions established at Akbar's earlier palaces. For example, the façade's arched Sikri sandstone niches trimmed with white marble (Fig. 3) are very similar to those on the so-called Jahangiri Mahal of Akbar's Agra Fort, constructed between AD 1563–71.[30] Even more ornate than Akbar's buildings, the Jagat Śiromaṇi Temple is richly covered with sculptured imagery as well as ornately carved stencil-like patterns recalling similar designs at Fatehpur Sikri. This, like the Baikatpur temple, is constructed in honour of a deceased Kachhwaha, this time Man Singh's eldest son and heir apparent, Jagat Singh, who died at Agra in AD 1599. While Man Singh is not the actual patron of this temple, he doubtless had a role in its construction, for the patron was his chief wife, the mother of Jagat Singh; she constructed the temple to perpetuate the memory of her son.[31] In this same manner the later princess Sultan Nisar Begum, Jahangir's eldest daughter, constructed tombs in Allahabad for her mother, the Kachhwaha princess Shah Begum, Raja Man Singh's sister, and her brother, Prince Khusrau.[32]

The tradition of building in honour of a deceased member of the Kachhwaha royal family appears to be well established. All three inscriptions on Man Singh's Govind Deva Temple mention his father's and grandfather's names, unusual since his lineage is rarely indicated in other *parwānas* or inscriptions.[33] This suggests that the Govind Deva Temple, commenced within four months of his father's death and his own accession to the throne, may have been erected not only to glorify his rule, but also to commemorate his father's name. Indeed, ostensible reverence for his father is indicated by his performance of *śrāddha* (rites propitiating the memory of a deceased father) at Gaya for 45 days, exceeding by far the prescribed maximum period.[34] There Man Singh constructed his own town in conjunction with his performance of *śrāddha*.[35] This site, on the opposite bank of the river from Gaya, is still today known as Manpur. The area's fortified walls, now virtually destroyed, and several wells are attributed to Man Singh as is a Śiva temple (Fig. 4).[36] Although uninscribed, the temple is constructed in the same idiom as the Baikatpur temple, although its *śikara* is taller and more slender.

The monuments discussed thus far, it might be argued, developed from Raja Man Singh's personal piety as well as a wish to honour his ancestral name. That these temples also happened to serve Mughal interests may have played some role in Raja Man Singh's decision to erect them, but this was most probably of secondary importance. For example, Raja Man Singh is credited with rebuilding and reconsecrating the Jagannath Temple in Puri after his successful campaign against the Afghan *zamindars* (local landholding élites) controlling Orissa.[37] The land around the temple was proclaimed crown land;[38] thus no restoration or reconsecration of the temple could occur without imperial sanction. Man Singh's restoration of the temple was intended to reward the Orissan rajas, long suppressed by Afghan chiefs, when these rajas acknowledged Mughal authority. The reconstruction underscored Mughal presence in Orissa and hence Man Singh's standing in the eyes of Akbar. It also allowed Raja Man Singh personal merit for work at the esteemed Jagannath Temple.

In other aspects of his patronage, Raja Man Singh's role as a high-

ranking Mughal *amīr* and governor helped formulate his architectural output. During his enormously successful tenure as governor of Bihar, from AD 1587 to 1594, he at last essentially consolidated Mughal power there.[39] He established his headquarters in Bihar at Rohtas fort, situated in the Kaimar Hills, above the Son river, some 65 kilometres southeast of Sasaram. Mughal chronicles called Rohtas the largest hill-fort in all [of] India; one writer described Rohtas as so strong that it was safe even from the idea of attack.[40] In AD 1576 the Mughals captured Rohtas from rebel Afghan forces. This hill-fort, about 45 kilometres in circumference, was an essential garrison in controlling the rest of eastern India. Natural streams traverse the terrain, and several deep tanks are on the hill top, which according to Abu'l Fazl allowed for the cultivation of adequate crops to assure the inhabitants food and water during a long siege.[41] No other fort in eastern India could begin to equal Rohtas in strength or size, thus explaining why possession of it was pivotal to controlling Bihar, Bengal, and Orissa.

Before Raja Man Singh took command of the fort, only fortified walls and gates, two mosques constructed several kilometres apart, and a few tombs graced the hill; there was also a temple, located on the hill's highest point.[42] Capitalising on age-old legends associated with the hill, Raja Man Singh transformed what was merely the shell of a fort into a populated centre which served to reinforce the impact of Mughal presence.

Rohtas hill had long been identified as the dwelling of the legendary king Hariśchandra and his son, Rohitāśva, from which the fort's name is likely derived. On the hill's highest spot was a temple, datable to about the eighth century as indicated by the remaining pieces around the newer present temple, dedicated to the hill's tutelary hero, Rohitāśva. At the foot of the temple, Raja Man Singh constructed a small square-plan structure surrounded by an ambulatory and surmounted by a true dome (Fig. 5), recalling the tomb of Shaikh Salim Chishti at Fatehpur Sikri. The dome's interior ribbing also recalls similar techniques on the Fatehpur Sikri Jami mosque as well as the so-called Raja Birbal's house.[43]

Traditionally this temple is said to be dedicated to Hariśchandra, a mythical king whose qualities embodied unique truth and integrity.[44] The smaller temple, built by Raja Man Singh, may be considered an offering to the more elevated temple dedicated to the hill's presiding deity, thus representing Raja Man Singh's quest for the deity's acceptance of his temporal authority over Rohtas.[45]

The construction of this temple appears to have been more than an act of personal piety on the part of Raja Man Singh. His initial task upon

assuming the governorship of Bihar was subduing the local *zamindars*. Some of these, such as the Cheros and others living south of Rohtas, claimed that the hill originally was their home.[46] It thus would follow that Rohtashva, to whom the lofty hill was originally dedicated and, moreover, the hill's presiding deity, would have a special meaning for them. Rohtas, seat of the demi-god Rohitāśva, was now, in fact, the seat of Mughal authority in Bihar. That fact was underscored by the presence of a Mughal-style temple—radically different from any temple in Bihar—situated at the foot of Rohitāśva's temple, as if authority now flowed from the god to the Mughals.[47]

There may be yet additional significance to the relationship between the Hariśchandra Temple and Raja Man Singh's efforts to transform this hill into a Mughal capital. Like this mythical king, Raja Man Singh claimed descent from the solar race. There is another aspect of common heritage upon which Man Singh probably sought to capitalise. Because of his righteous character in a previous life, Hariśchandra was granted a magnificent palace that provided all its owner's wishes.[48] That legend was probably recalled by those who saw the enormous palace Man Singh built as the Mughal administrative centre-cum-residence in Rohtas fort, by far the most impressive palace for any governor in the Mughal empire. Thus as significant as the Hariśchandra Temple might have been in the eyes of the suppressed *zamindars* who originally claimed Rohtas as their home, the monumental palace doubtless made the bigger impression.

More than equate Raja Man Singh with a locally popular deity, this enormous palace, not constructed by the emperor, raises questions concerning patronage. Usually governors were only in one place for a few years and then were shifted to another so that a power base could not be established.[49] Why, then, would Raja Man Singh invest so heavily in a structure that he could use so briefly? Perhaps he did so because, in exchange for constructing a building so clearly affirming Mughal presence, he was assured possession of Rohtas long after his tenure as governor of Bihar.

Indeed, inscriptional evidence shows that Man Singh did maintain Rohtas after his transfer to Bengal. The inscription on his palace is dated April 1596, a full two years after he was transferred from Bihar to become governor of Bengal. It records additions to this palace, indicating that he still used it, even though Sa'id Khan had replaced Man Singh as governor of Bihar two years earlier, in March 1594.[50] Still later, in AD 1607, Raja Man Singh constructed a magnificent fortified gate to the

fort.[51] This construction might appear perplexing since Abu'l Fazl reports that Man Singh's *jāgīr* had been transferred to Bengal.[52] There is, however, an explanation.

While the Rohtas fort was self-sufficient, it was not income-yielding land. Likely, then, the fort was left in Raja Man Singh's command while his income-yielding *jāgīr*s in the Bihar-Gangetic valley were surrendered to Sa'id Khan. This possibility is bolstered by a statement in the *Akbar Nāma* that in the last year of Akbar's reign, an additional *pargana* (an administrative unit consisting of villages), not far from Rohtas, was given to Man Singh for the maintenance of the fort.[53]

Raja Man Singh remained at Rohtas until early in AD 1608. Mirza Nathan, a noble serving in Bengal during Jahangir's reign, notes that Raja Man Singh's holdings in Rohtas were only transferred in late AD 1607.[54] Yet he did not leave the fort until early AD 1608. Jahangir laments that only after six or seven summons to present himself at the imperial court, did Raja Man Singh at last vacate Rohtas.[55]

Thus Raja Man Singh's tenure over Rohtas lasted nearly twenty years, a remarkable span when most *jāgīr*s were changed every few years. Although the reasons for this are not certain, it appears likely that Man Singh's willingness to invest his personal resources in a palace that far surpassed that of any other Mughal governor was exchanged for long-term tenure in the palace and hill-fort. He could maintain it until he fell from favour, as happened to a contemporary *amīr*, Ram Das Kachhwaha, who lost his palace when he lost Jahangir's esteem.[56]

With regard to Raja Man Singh's palace, one may ask whether the construction of this enormous complex served himself or the needs of the Mughal empire. The palace, measuring 200 by 185 metres, is modelled loosely on the plan of Fatehpur Sikri, Akbar's great city palace.[57] Like the Fatehpur Sikri palace, Man Singh's palace can be divided into administrative and domestic sections. The domestic portions included quarters for servants, *hammām*s (baths), and latrines as well as living quarters for Man Singh, the governor. The administrative section included areas intended for public and private purposes. The public area includes a viewing balcony for public audience that faces an open quadrangle. This quadrangle is the large rectangular area in front of the palace which until now has been incorrectly identified as a *serai*.[58] The areas used for private purposes are less clear, but the area includes a rather elaborate set of office buildings. Among them are one traditionally called the *bārādari* as well as a fine set of chambers today called the Private Audience Hall that is situated just behind the public viewing balcony. Both a public and private audience chamber were necessary so that the governor could enact the sort of court ritual that was maintained at the distant imperial seat. Not only this palace's correspondence to the building types found at Fatehpur Sikri, but also its scale reveals a debt to Akbar's earlier palace. Raja Man Singh's palace was by far the largest non-imperial one in the entire Mughal empire.

Raja Man Singh's palace was not simply an enlarged version of a noble's dwelling; rather, it truly reflected Akbar's residential and administrative centre at Fatehpur Sikri. The mansions of nobles were dwellings that apparently lacked chambers such as the private and public audience halls at Rohtas arranged on the imperial model. For example, Safdar Khan's mansion in Sasaram, constructed early in Jahangir's reign, fits François Bernier's description of a noble's handsome house.[59] It consists of a large central chamber covered with a high vaulted ceiling, likely a *diwān khānā*, that is, a large central chamber that served as a reception room. Around this central chamber are several ancillary chambers and terraces. As for the houses of other *subahdār*s (governors), we do not know if they usually had public and private audience halls. The Jaunpur Fort did have a public audience hall constructed by a governor in Akbar's reign, but it was not part of the governor's house and in any event did not resemble any imperial audience hall.[60] However, the Rohtas Public Audience Hall is part of the palace and is modelled decidedly on that of Fatehpur Sikri in plan, appearance and overall arrangement. Indeed, the size of the Rohtas Public Audience Hall considerably surpasses the one at Fatehpur Sikri, although it is smaller than the one Akbar constructed at the Lahore Fort, then the active imperial headquarters.[61]

Not only does the Rohtas palace recall the general plan and arrangement of Fatehpur Sikri, but also the style is very much in keeping with that of imperial Mughal architecture. Examples of this are seen in both the Private Audience Hall, whose carved pillars recall those of other Akbari palatial structures, and the arcuated forms of the *bārādari*, which resemble the Timurid-inspired form of the Fatehpur Sikri *hammāms*.[62] In these ways and others, the palace is the first structure to introduce the courtly Mughal style of architecture to eastern India. Raja Man Singh's patronage of the palace thus provides a powerful statement of Mughal presence, especially effective in showing Mughal authority over local *zamindar*s, whose forts were crudely constructed. For example,

Naulaukhgarh, in Monghyr District, Bihar, the headquarters of a contemporary *zamindar* suppressed by Raja Man Singh, is only composed of rudely made outer walls and has no interior structure.[63]

Mughal presence was not the only image that the patron of this imposing city sought to project. For the palace itself and the inscriptions on it suggest that Raja Man Singh was fully aware of his dual role as Mughal governor and *manṣabdār* (rank holder) on one hand and raja and head of the Kachhwaha house on the other. A large stone slab at the palace entrance gate bears two inscriptions, one in Persian and one in Sanskrit. The one in Persian suggests that Raja Man Singh primarily built the palace as a servant of Akbar, for it first and most extensively addresses the emperor, Sultan Jalalu'd-din Muhammad Akbar Badshah Ghazi, with only brief reference to Raja Man Singh, the actual patron. But in the longer Sanskrit inscription on the same slab, Raja Man Singh asserts his own authority as head of the Kachhwaha Rajput house as well, for Akbar's name is omitted altogether. Instead, the Raja is mentioned twice, not using his Mughal title but rather identifying himself as *Śri mahārājādhirāja mahārāja* (king of kings, overlord), implying that he was supreme monarch.

The grandiloquent title on a palace intended to serve both the governor's needs as well as those of the state underscores the dualistic nature of the relationship between raja and Mughal emperor. Under the Mughal state system, serving the emperor included defending one's own religion, honour and even patrimony if necessary.[64] Thus, evoking a title that symbolised Rajput ideals and aspirations did not conflict with Man Singh's role as Akbar's governor, for both were integral to the successful functioning of the Mughal empire. Similarly, the resemblance of the Rohtas palace to the ones at Fatehpur Sikri both recalls the emperor and permits Man Singh to assume the guise of the ruler that in fact he was. He thus played out his dual role as the emperor's agent and raja in his own right, a duality characteristic of the relationship between Akbar and those lesser authorities beneath him.

The late sixteenth century, the period of Rohtas construction, was a time of rapid consolidation of Mughal authority in Bihar. In Bengal, however, consolidation of Mughal power did not come so easily. Rebel Afghans and *zamindars* who had been pushed from Bihar and Orissa took shelter in Bengal, where they continued to challenge Mughal supremacy. In AD 1594, Raja Man Singh was transferred from Bihar to assume the governorship of Bengal. A year later, he built a new capital at a site known today as Rajmahal, about 40 kilometres to the northwest

of the former capital. He had two reasons for moving the capital. First, the Ganges had shifted away from the earlier Mughal capital, Tanda, which as a result, turned into swampland, a breeding ground for disease that devastated the Mughal army. Moreover, Rajmahal, located on the opposite bank of the Ganges, about 40 kilometres to the northwest, was strategically a superior location. Traditionally Rajmahal, today in Bihar state, guarded the ancient pass to Bengal, long protected by the Gaur Sultans.[65] So, just as Man Singh capitalised on the notion that Rohtas hill, the ancient home of the Cheros and other *zamindars*, was now the seat of Mughal authority in Bihar, here Man Singh held and embellished the key to Bengal. The selection of this site for the new capital of Bengal had further significance, since here at Rajmahal, Akbar's army in AD 1576 had defeated the last Afghan ruler of Bengal, finally ending over 2,000 years of independent rule in Bengal. Thus the site of Mughal victory—and Afghan defeat—was memorialised by a permanent Mughal presence and, as if taking power from victory, the seat of its government.

Abu'l Fazl reports that in a short time, Raja Man Singh constructed 'a choice city' to which the 'glorious name' Akbarnagar was given.[66] However, Shaikh Farid Bhakkari writes that this name was not so harmoniously bestowed. Originally Raja Man Singh named it Rajanagar, after himself and in recognition of his own patronage. Akbar, however, clearly objected for he renamed the city Akbarnagar.[67] The story, still repeated in Rajmahal today, recalls the apparent tension seen in the Rohtas palace inscriptions, suggesting that while the new capital was intended to serve the needs of the Mughal empire, Raja Man Singh had no desire to conceal his own achievements. 'Abdu'l Latif, who visited Rajmahal in AD 1608, indicates that the memory of Raja Man Singh's beneficence survived him, for he writes that while officially the Mughal capital was called Akbarnagar, in deference to the later emperor, popularly it was called Rajmahal, after Akbar's governor, the city's first patron.[68] Today it still bears the name Rajmahal, indicating the persistent recognition of the patron's role, while the name Akbarnagar is known only from Mughal texts.

An eighteenth-century biography of Mughal *amīrs* states, 'The Raja had established wonderful pomp, greatness, influence, and authority in Bengal.'[69] At least some of this was probably achieved through his architectural patronage in Rajmahal. Among his structures are a small temple, a bridge (still in use today) and an enormous Jami mosque.[70] The construction of a temple and utilitarian bridge is not surprising; this Hindu raja's patronage of a mosque, too, is not unusual, for earlier he

had built a mosque in Lahore and since AD 1590 had maintained the shrine of a Muslim saint in nearby Hajipur.[71] But none of this would explain the tremendous size of the Akbarnagar Jami mosque, 77 by 65 metres.

This mosque, today partly ruined, is notably not designed in the style standard since the mid-sixteenth century in eastern India, that is, a single aisled, three-bayed type.[72] Rather, in plan the Akbarnagar Jami mosque resembles earlier Mughal Jami mosques, for example Humayun's mosque at Kachpura.[73] In each, a central corridor is flanked on either side by double-aisled side-wings. Furthermore, the arrangement of the Akbarnagar mosque's end chambers, otherwise unknown in Bengal, resembles that of Akbar's Jami mosque at Fatehpur Sikri.[74] Other features of the Akbarnagar Jami mosque also recall the Fatehpur Sikri Jami mosque, although they are no longer apparent but recognisable from an AD 1810 drawing by Buchanan Hamilton.[75] It indicated that the central barrel vault was concealed by a high rectangular *pīshṭāq*, faced with bands of contrasting material, following the Fatehpur Sikri model.

Thus, this imposing mosque, built not in the Bengal tradition, but that of the great Mughal Jami mosques, was probably intended as a statement of Mughal presence in Bengal. Certainly in no other Mughal provincial seat of government during this period was such an extraordinarily large mosque built. In part, the size of the Akbarnagar mosque may be attributed to Man Singh's enthusiasm for building, but we must recall the fact that he was a Hindu. In fact, local tradition holds that Raja Man Singh did not originally intend to construct a mosque, but rather a temple; Akbar, however, ordered that a mosque instead be built, since such a structure would better suit the needs at hand.[76] Man Singh seems to have accepted this order with enthusiasm, for the size of this mosque is unparalleled in the works of non-imperial patrons. Its size, further, may be explained by the chronic difficulties the Mughals had in subduing Bengal. Using the Akbarnagar Jami mosque as a symbol of imperial presence in the newly established capital doubtless would have had effect since many of the rebels, themselves ex-Mughal *amīrs*, would have recognised the allusion to the great mosque at Fatehpur Sikri.

Man Singh governed Bengal for over a decade, but the last years proved difficult even for that 'old wolf of state', Jahangir's epithet for the Raja.[77] Jagat Singh, his ablest son and heir-apparent, had died; the continuous warfare against rebel Afghans and *zamindars* in backwater Bengal was taxing. Although Akbar, just before his death, had awarded the Raja a *manṣab* of 7,000, by far the highest ever bestowed on an

amīr,[78] Jahangir's accession in AD 1605 left Raja Man Singh in a precarious position. Man Singh had actively supported Khusrau's succession to the throne, not Jahangir's. Nevertheless, Jahangir, recognising that Man Singh had been one of Akbar's favourites, reaffirmed the Raja as governor of Bengal. When rebels seized Rohtas in AD 1605, it was Man Singh, well acquainted with the terrain there, not the Mughal governor of Bihar, by now residing at Patna, who was dispatched to quell this disturbance. Although Man Singh was able to expel the rebels within two weeks,[79] he remained in the fort for well over a year after the campaign was completed.

Even after Jahangir's accession, Raja Man Singh further fortified Rohtas. Except in one area where extensive man-made fortifications were required due to a depression in the terrain,[80] the hill was naturally fortified. In this depression, Man Singh constructed a monumental tripartite defensive system. It consisted of massive walls and three gates, the largest and first known today as the Kathautiya Gate, the most impressive of all at Rohtas. The gate is dated March 1607 in bilingual inscription.[81] Thus the gate was completed just before Raja Man Singh's final departure from Rohtas for Agra. Unlike Man Singh's other inscriptions and *parwānas* where the Mughal monarch's name is always given, here Jahangir's name is omitted, although Man Singh's own is recorded. While ordinarily not mentioning the sovereign's name might be ignored, here we must recall that Jahangir was suspicious of Man Singh and all the old guard who had long served in Bengal and Bihar.[82] That suspicion was probably justified as indicated by the fact that Man Singh failed to obey Jahangir's summons to the court and, perhaps above all, by his earlier support of Khusrau, not Jahangir.

One might ask why Man Singh constructed the monumental gate complex so late in his tenure of Rohtas. Should we view this as a move towards breaking with the centre, or should we view it as one obligation for a noble of his rank? In spite of Man Singh's evident coolness to Jahangir the man, he remained loyal to Jahangir as Mughal emperor. Man Singh fulfilled his courtly obligations with generosity, for example, presenting 100 elephants to the emperor. He further served the state loyally, using personal income to supply the nobility with adequate food in areas where no rations at normal market rates were available.[83] Man Singh's construction of the gate, then, must be in keeping with the duties of a high-ranking Mughal officer. He continued to maintain the fort he loved dearly, even though he must have realised that his own tenure there was at an end, for Jahangir repeatedly had recalled him to court.

Constructing the gate may have given Man Singh personal pride, but more importantly, doing so assured the maintenance of Mughal supremacy at a place pivotal to controlling eastern India, important to Man Singh even though tensions had developed between him and the emperor. In Mughal India, tension between the monarch and his subordinates was tolerated, a source of strength to the empire in relatively heterogeneous India. That is quite different from the unquestioning loyalty demanded by the contemporary emperors of Safavid Iran and Ottoman Turkey.

Other information given in the Kathautiya Gate's inscriptions provides useful insights into Man Singh's architecture. The same priest (*purohit*), supervisor (*dārogha*) and architect (*ṣan'atgar*) who earlier had designed, blessed and supervised the Rohtas palace now were in charge of these fortifications. Thus Man Singh maintained these persons for over fifteen years. We do not know, however, if they remained at Rohtas throughout this period or if in periods of lull at Rohtas they supervised his works at Rajmahal, Baikatpur, Gaya, and other places in eastern India. While we know a great deal about the patronage of painters during this formative stage of Mughal rule, we know relatively little about that of artists involved in architecture. These two inscriptions indicate that, like painters, architects and supervisors were maintained by the nobility on a long-term, ongoing basis.

Besides the three mentioned in both the palace and Kathautiya Gate inscriptions, two others, the priest Gopaldas, and the supervisor Bha's Khan Bani Isra'il, are mentioned as participating in this gate's construction. These fortifications had to be erected quickly, so it is possible that Man Singh anticipated a method used by the rebel prince Shah Jahan in constructing his fort at Teliagarhi. There, according to Mirza Nathan, who was in charge of the fort's overall construction, a different officer was in charge of every 20 feet during the fort's erection.[84]

In AD 1608, Man Singh was granted permission to go to Amber, his ancestral home, in part to organise fresh troops and supplies for a campaign in the Deccan; he remained there for about eighteen months.[85] During this time, Man Singh devoted attention to construction in his own domain. While the date of renovations to his palace at Amber are not known, an inscription dated AD 1612 shows that at this time he rebuilt the fort at Jamwa Ramgarh, known then as Rajgarh, 30 kilometres from Amber; this was the Kachhwaha ancestral home.[86] The inscription further records the construction of a well and garden at Rajgarh by 'the celebrated Maharajadhiraja Sri Man Singh, the greatest among kings,

the vanquisher of entire foes with his prowess and the conqueror of the entire universe'.[87]

Also at this time, he installed in his Amber palace the image of Śila Mata, a form of Kali, taken in AD 1604 as booty from Kedar Rai, one of the most oppressive Bengali *zamindars*. Ten priests were brought from Bengal; their descendants still today serve the deity. According to legend, possession of the image of Śila Mata had protected Kedar Rai from defeat in much the same manner that Jarāsandha's amulet was believed to ensure the owner's victories. Once the Kachhwahas took the image, the legend proved valid, for Man Singh's troops defeated Kedar Rai.[88] Śila Mata, originally brought from Bengal as a symbol of Man Singh's victory, became and remains today a symbol of strength and victory for Man Singh's descendants. According to local tradition, the Kachhwaha rajas as well as their subjects worship the image when in quest of political and military success and in thanksgiving for victory. As a case in point, the temple was flooded with devotees immediately after the overwhelming victory of the Congress-I in December 1984.[89]

Following this time in Amber, Man Singh was sent with his troops to the Deccan. While there, the nature of his patronage appears to have changed, although this change probably relates more to the nature of his appointments than to any new attitude towards the state. In the Deccan, Man Singh was not the governor. Moreover, the Mughal position in the Deccan remained precarious, for neither Man Singh nor the Mughal army in general did well. No longer was Man Singh's beneficence expended on permanent architecture outside his own domain. He did, however, provide mosques and baths in tent form on marches,[90] thus in his final years continuing his long-standing policy of serving Mughal needs through architectural patronage.

Throughout Raja Man Singh's career, architectural patronage served varied and at times even seemingly conflicting ends. Palaces such as the one at Rohtas were constructed for his own dwelling, administration, and image, but inevitably they also represented Mughal presence and were built with that in mind. Similarly, the mosques this Hindu constructed to serve the needs of Muslim subjects represented a visual reminder of imperial presence. Temples were constructed as personal gestures in part to commemorate his family and in part to secure personal religious merit. They were built, however, with imperial permission.[91] Although the construction of temples did not relate directly to the Mughal state, but elevated only the patron's prestige, it utilised an architectural style

that originated with the Mughal court and in essence underscored Mughal presence. It also helped promulgate a uniform aesthetic throughout north India. Thus even the construction of temples served the state. Just as Akbar was the ultimate head of state whose authority was diffused through his nobles and others, so artistic and architectural styles used in the centre were disseminated throughout the domain by these officials. The degree of imperial intervention in Man Singh's construction remains unclear, but such enterprise certainly served the state and was valued by the emperor. This is apparent from the second of twelve orders issued upon Jahangir's accession. It states that it is the duty of *jāgīrdārs* (*amīrs*) assigned income from property in lieu of salary) to build mosques, *serāis*, and wells in the hinterlands to encourage population and stability in the land.[92] This Raja Man Singh already had done—to such an extent and so successfully that his building activity may have stimulated the order.

Notes and References

I am grateful to several colleagues who have read this work in various stages, especially to Barbara D. Metcalf for her insightful comments.

1. Gopal Narayan Bahura, *The Literary Heritage of the Rulers of Amber and Jaipur* (Jaipur, 1976), p. 29, cites the 'Jahangirajasa Chandrika' by the poet Keśava. The poet is probably alluding in part to Raja Man Singh's role in spreading Mughal taste. While Man Singh is best known for his architectural patronage, see ibid., pp. 28–34, for his support of poets and literateurs.
2. This article is not intended as a complete catalogue of Raja Man Singh's work, but rather an analysis of his patronage, particularly that done within Mughal territory. Hence not all his works are considered here. Work at Man Singh's *watan jāgīr*, Amber, his ancestral domain, figures even less in the article; his *chattrī* and palace at Amber and his palace at Bairath are excluded altogether.
3. For example, the mothers of both Jahangir and his son, Khusrau, were Kachhwaha princesses. Khusrau's mother was Raja Man Singh's sister.
4. Abu'l Fazl, *Akbar Nāma*, 3 vols, trans. H. Beveridge, rpt. edn (Delhi, 1972–3), vol. III, p. 236. For a summary of Raja Man Singh's career, see the eighteenth-century biography by Samṣamu'd Daula Shah Nawaz Khan and Abdu'l Hayy, *Ma'asiru'l-Umara*, 2 vols, trans. H. Beveridge rpt. edn (Patna, 1979), vol. II, pp. 48–57 (hereafter *Ma'asir*), that incorporates many references to Man Singh from sources compiled during his time, especially from the *Akbar Nāma*.
5. Man Singh was acting governor of Bihar while his father was nominal governor; however, on account of his mental and physical illness, Raja Bhagwant Das never assumed responsibility there.

6. Abu'l Fazl, *Akbar Nāma*, vol. III, p. 236 ff. Moreover, the *Ma'asir*, vol. II, pp. 48–9, states that, 'On account of Raja Man Singh's high intellectual attainments, abundant courage, high position and close connection with the king, he was at the head of the Amirs and nobles of Akbar.'
7. Farid Bhakkari, *Dhakhirat al-Khawānīn*, 3 vols (Karachi, 1961–74), vol. I, p. 104.
8. Abu'l Fazl, *Akbar Nāma*, vol. III, p. 736.
9. R.N. Prasad, *Raja Man Singh of Amber* (Calcutta, 1966), p. 74.
10. Muhammad Nuru'd-Din Jahangir, *Tūzuk-i Jahāngīrī*, 2 vols, trans. A. Rogers, rpt. edn (Delhi, 1968) (hereafter *Tūzuk*), vol. I, p. 99.
11. In the three inscriptions on the temple, the patron's name, Man Singh bears his newly bestowed title, Raja. Since Raja Bhagwant Das died in November 1589, during the 34th regnal year, and the 35th regnal year commenced in March 1590, the temple's dedicatory slabs must date between the end of AD 1589 and the first three months of AD 1590. Prasad, *Raja Man Singh*, pp. 157–8, misdates the temple as a result of incorrectly computing the Vikrama era. For a transcription of the epigraphs, see ibid., pp. 16–17, 179–80, and F.S. Growse, *Mathura: A District Memoir*, rpt. edn (Ahmedabad, 1978), pp. 243–4, who also provides a plate and plan of the temple.
12. Prasad, *Raja Man Singh*, p. 158.
13. This observation has been made by several scholars, including James Fergusson and R. Phene Spiers, *History of Indian and Eastern Architecture*, rev. edn (London, 1910), vol. II, p. 156, Growse, *Mathura*, pp. 23–4, and Percy Brown, 'Monuments of the Mughul Period', *Cambridge History of India* (Cambridge, 1922), vol. IV, p. 547. Local tradition, however, assumes that Aurangzeb destroyed the superstructure.
14. Growse, *Mathura*, pp. 241–57.
15. Abu'l Fazl, *Akbar Nāma*, vol. II, pp. 294–5.
16. Growse, *Mathura*, p. 241.
17. According to tradition, the Gopinath Temple was built by a Kachhwaha of the Shaikhawat branch and the Jagal Kishore Temple was constructed by the Gopinath Temple patron's brother, Growse, *Mathura*, pp. 253–4.
18. For plans of these eleventh-century temples, see Susan L. Huntington, *The Art of Ancient India: Buddhist, Hindu, Jain* (New York, 1985), figs 20.34, 20.44, and Growse, *Mathura*, p. 248, for a rough rendering of the Govind Deva Temple's plan.
19. For illustrations of the Bhagwant Das Hari Deva Temple, see Henry Hardy Cole, *Illustrations of Buildings Near Muttra and Agra Showing the Mixed Hindu and Mahomedan Style* (London, 1873), no. 8. The Ambikeshvara Temple's construction is cited in Shyam Singh Ratnawat, ed., *Kachhwan Ri Vanshavali*, (Jaipur, 1981), p. 5 (hereafter *Vanshavali*). The temple remains unpublished.
20. The basic elements utilised in the temple are found at Akbar's city-palace, Fatehpur Sikri. The best source for comprehensive illustrations and plans of the site is Edmund W. Smith, *The Moghul Architecture of Fatehpur-Sikri*, 4 vols, Archaeological Survey of India, New Imperial Series, vol. XVIII (Allahabad,

1894–7). For an illustration of the temple's vaulting, see Ebba Koch, 'The Architectural Forms', in M. Brand and G.D. Lowry, eds, *Fatehpur Sikri* (Bombay, 1987), fig. 8.22.

21. For example see Moti Chandra and Karl J. Khandalavala, *An Illustrated 'Aranyaka Parvan' in the Asiatic Society of Bombay* (Bombay, 1974), p. 7; Pramod Chandra, *Ṭūṭi-nama*, 2 vols (Graz, 1976), vol II, folio 227; Cole, illustrations plate 9.
22. Ram Sharma, 'Akbar's Religious Policy', *Indian Historical Quarterly*, vol. III, no. 2 (1937), p. 312. Having heard of their beauty, Jahangir also visited these temples. See *Tūzuk*, vol. II, pp. 103–4.
23. The temple has been converted into a mosque known as the Gyanvapi mosque situated adjacent to the Viśvanath Temple. James Prinsep, *Benares Illustrated* (Calcutta, 1833), n.p., provides a plan and drawing of the original temple. For examples elsewhere, see Smith, *The Moghul Architecture*, vol. II, plates XVIII, LXV and the Govind Deva Temple itself.
24. For illustrations, see Prasad, *Raja Man Singh*, plates 23–7.
25. See Brahmadeva Prasad Ambashthya, 'History and Documents of Baikathpur Temple', *Journal of the Bihar and Orissa Research Society*, vol. XI, part IV, nos 1–4 (1960), pp. 343–57.
26. Mughal documents in ibid., pp. 347–8, indicate that the temple is situated on the cremation site of Man Singh's mother. The tradition that the temple was built to commemorate Man Singh's victory is preserved by the temple's hereditary care-keepers, the Tiwari family. It was related to me by the present head priest of the temple, Sri Vijay Kumar Tiwari, a descendant of Sahas Tiwari who was brought from Amber to Baikatpur by Raja Man Singh to serve as the temple's head priest.
27. For the earlier written account regarding the amulet, see Francis Buchanan Hamilton, *An Account of the Districts of Bihar and Patna in 1811–12*, edited by J.F.W. Jackson (Patna, 1936), pp. 75–6.
28. Ambashthya, 'History and Documents', pp. 343–60.
29. Ibid., pp. 343–60.
30. Percy Brown, *Indian Architecture: Islamic Period*, 5th edn (Bombay, 1968), plate LXVIII, figs 1, 2.
31. *Vanshavali*, pp. XXV, 181.
32. Z.A. Desai, 'Inscriptions from the Khusraw Bagh, Allahabad', *Epigraphia Indica: Arabic and Persian Supplement* (1961), pp. 64–8.
33. The sole exception is an inscription dated AD 1612 recording the construction of a fort, well, and garden in his ancestral domain. See Prasad, *Raja Man Singh*, p. 16.
34. See *Vanshavali*, p. 85. Claude Jacques, *Gaya Mahatmya* (Pondicherry, 1962), pp. 388–90, states that the maximum number of stations to be visited is between 48 and 50; which can be done in eight days. Man Singh's pilgrimage exceeded this by 37 days.
35. *Vanshavali*, p. 85.
36. Prasad, *Raja Man Singh*, p. 163, states that undated *farmans* (imperial decrees) bearing Mughal seals in possession of the Baikatpur temple provide for the maintenance of the Manpur Temple. Sri Vijay Kumar Tiwari, the current head priest, however, indicated to me that there were no papers of this nature in Baikatpur.
37. *Vanshavali*, p. 85.
38. Abu'l Fazl, *Akbar Nāma*, vol. III, p. 880.
39. For Man Singh's activities during this period, see ibid., pp. 836, 872–83, 878–80, 934, 940–1, 997.
40. See *Ma'asir*, vol. II, p. 226, and also Abu'l Fazl, ibid., p. 146. For a complete description of the fort and its interior structures, see Muhammad Hamid Kuraishi, *List of Ancient Monuments Protected Under Act VII of 1904 in the Province of Bihar and Orissa*, Archaeological Survey of India, New Imperial Series, vol. LI (Calcutta, 1931), pp. 146–83, and Catherine B. Asher, ed., *Archive of Bihar and Bengal Art, Part II: Islamic*, American Committee for South Asian Art Microfiche Archive Series (Leiden, 1992).
41. Abu'l Fazl, *Akbar Nāma*, vol. III, p. 146.
42. Scattered remains from the older temple indicate that it dated to about the eighth century. According to a Sanskrit inscription originally situated above the Kaṭhautiya Gate and now in the Indian Museum, Rohitāśva, likely referring to the temple, was rebuilt and a group of excellent temples was erected by an otherwise unknown ruler, Mitra Sena, of the Tomar clan in AD 1631. See 'Sanscrit Inscription on the Slab Removed from above the Kothoutiya Gate of the Fort Rohtas', *Journal of the Asiatic Society*, vol. VIII (1839), pp. 693–701. Qeyamuddin Ahmad, *Corpus of Arabic and Persian Inscriptions of Bihar* (Patna, 1973), p. 237, cites the posting of a Mughal *qal'adar* (fort commander) at Rohtas only one year later, in AD 1632–3. Thus Mitra Sena's presence at Rohtas is perplexing; however, Khondhakar Mahbubul Karim, *The Provinces of Bihar and Orissa Under Shahjahan* (Dacca, 1974), pp. 72–4, indicates that the whole of south Bihar, especially the area around Rohtas, remained semi-independent until Aurangzeb's reign. Likely Mitra Sena was one of many rajas who managed to assert his own authority for a short time until Mughal rule was once again established.
43. For the Fatehpur Sikri illustrations, see Smith, *The Moghul Architecture*, vol. IV, plate XV, plate VI, vol. II, plate VI. For illustrations of the Rohtas Temple, see Asher, *Archive of Bihar and Bengal*.
44. Vettam Mani, *Puranic Encyclopedia* (Varanasi, 1975), p. 309. Although the temple bears no inscription, long-standing tradition holds that it is a product of Man Singh's patronage. Indeed, stylistically it belongs to the late sixteenth century. Man Singh was the sole Hindu holding Rohtas during this time, thus supporting tradition.
45. There is Kachhwaha precedent to suggest that this was Raja Man Singh's motivation, for one of the early Kachhwaha rulers, the founder of Amber, upon divine instruction constructed a temple dedicated to the tutelary deity of Amber. After the construction of the temple, the Kachhwaha ruler was victorious in a pivotal battle expanding the family's territory. See *Vanshavali*, p. 5.

46. D.R. Patil, *Antiquarian Remains in Bihar* (Patna, 1963), pp. 487–8, and Kuraishi, *List of Ancient Monuments*, p. 147.
47. It is possible that the temple was erected shortly after Raja Man Singh's defeat of Puran Mal of Gidhaur, Raja Sangram and Anant Cheros in AD 1590, that is, his first significant action as the governor of Bihar. See Abu'l Fazl, *Akbar Nāma*, vol. III, p. 872.
48. Mani, *Puranic Encyclopaedia*, p. 309.
49. Irfan Habib, *The Agrarian System of Mughal India* (Bombay, 1963), pp. 256–60.
50. Abu'l Fazl, *Akbar Nāma*, vol. III, p. 999. Said Khan made Patna, not Rohtas, his headquarters. For the Persian text of this inscription, see Ahmad, *Corpus*, pp. 175–6. For the Sanskrit component, see Kuraishi, *List of Ancient Monuments*, pp. 168–9.
51. See Ahmad, ibid., pp. 186–7 for the Persian text: the Sanskrit component remains unpublished. As Kuraishi, ibid., p. 153, points out, this portion is badly damaged. I am, however, grateful to M.A. Dhaky, Krishan Deva and especially M.N. Katti for examining the text. While some of it is decipherable, the sections including the date and name are not.
52. Abu'l Fazl, *Akbar Nāma*, vol. 3, p. 999.
53. Ibid., p. 1251.
54. Mirza Nathan, *Baḥārīstān-i Ghaybi*, 2 vols, trans. M.I. Borah (Gauhati, 1936), vol. I, p. 4.
55. *Tūzuk*, vol. I, pp. 137–8; vol. II, p. 55.
56. 'Patal-Pota', in B.P. Ambashthya, *Non-Persian Sources on Indian Medieval History* (Delhi, 1984), p. 125. The palace was restored to Ram Das after his honour was restored, but it was declared royal property after his death, since he had no heirs. Ibid., pp. 127–9.
57. For a plan of the Rohtas palace, see Kuraishi, *List of Ancient Monuments*, plan facing p. 155. For Fatehpur Sikri, see Smith, *The Moghul Architecture*, vol. III, plates A, B, and Brand and Lowry, *Fatehpur Sikri* (Bombay, 1987), plans. B, C.
58. The quadrangle containing the Public Audience Hall is traditionally called a *serai*, but it is highly unlikely that a noisy *serai* would abut the private audience chamber on the east. Moreover, the seemingly asymmetrical arrangement of this large open courtyard, not aligned exactly with the palace proper, has in the exact centre of its east wall three projecting balconies aligned with the interior of the throne room, allowing the governor to present himself and hear petitions. Underneath this area is a platform, a traditional part of an imperial audience chamber.
59. François Bernier, *Travels in the Mogul Empire*, trans. and ed. Archibald Constable and Vincent Smith (Oxford, 1916), p. 247. For illustrations, see Asher, *Archive of Bihar and Bengal*.
60. A. Führer, *The Sharqi Architecture of Jaunpur*, Archaeological Survey of India, New Imperial Series, vol. XI, rpt. ed. (Varanasi, 1971), p. 21. An early drawing by Markham Kittoe of the Jaunpur Public Audience Hall is in John Burton-Page, 'Djawnpur', *Encyclopaedia of Islam*, n.s., vol. II, plate VIII.

61. For a plan of the Public Audience Hall at Fatehpur Sikri, see S.A.A. Rizvi and V.A. Flynn, *Fatehpur Sikri* (Bombay, 1975), plate facing p. 23, and Brand and Lowry, *Fatehpur Sikri*, plan C. For the Lahore fort one, see Muhammad Wali Ullah Khan, *Lahore and Its Important Monuments* (Karachi, 1964), p. 8.
62. For illustrations, see Brown, *Indian Architecture*, plate LXVI, figs 1, 2; Rivzi and Flynn, *Fatehpur Sikri*, fig. 92; Smith, *The Moghul Architecture*, vol. III, plate LXXV; and Asher, *Archive of Bihar and Bengal*.
63. Puran Mal's fort of Gidhaur, today known as Naulaukhgarh, was considered to be the finest of such forts. It was captured by Raja Man Singh when the *zamindar* 'could not preserve the fort which he regarded as his protection in the day of calamity'. Abu'l Fazl, *Akbar Nāma*, vol. III, p. 872. Francis Buchanan Hamilton, *Journal of Francis Buchanan Kept During the Survey of the District of Bhagalpur in 1810–11*, ed. C.E.A.W. Oldham (Patna, 1930), p. 189, described the fort as extremely crude. Today only massive rubble-made exterior walls remain.
64. John F. Richards, 'The Formulation of Imperial Authority under Akbar and Jahangir', in *Kingship and Authority in South Asia* (Madison, 1978), p. 275 and Norman P. Ziegler, 'Some Notes on Rajput Loyalties during the Mughal Period', in ibid., pp. 215–40, for similar notions.
65. Jadunath Sarkar, 'Travels in Bihar, AD 1608', *Journal of the Bihar and Orissa Research Society*, vol. 5, no. 4 (1919), p. 601. This article is a translation of the diary of 'Abdu'l Latif, who travelled through Bihar and Bengal in AD 1608.
66. Abu'l Fazl, *Akbar Nāma*, vol. III, pp. 1042–3.
67. Bhakkari, *Dhakhīrat al-Khawānin*, vol. I, p. 106.
68. Sarkar, 'Travels', p. 602.
69. *Ma'asir*, vol. II, p. 55.
70. For a description of most of these monuments, see Kuraishi, *List of Ancient Monuments*, pp. 217–20, and Catherine B. Asher, 'Inventory of Key Monuments', in G. Michell, ed., *The Islamic Heritage of Bengal* (Paris, 1984), pp. 118–21.
71. Hasan Askari, 'Some Documents Relating to the Mausoleum of Mamu Baja at Jarona, Hajipur', *Bengal Past and Present*, vol. I, no. 1b (1946–7), pp. 40–3.
72. For a discussion of the development of this mosque type in Bengal, see Catherine B. Asher, 'The Mughal and Post Mughal Periods', in Michell, ed., *The Islamic Heritage of Bengal*, pp. 193–6.
73. For a plan of Humayun's mosque, see *Archaeological Survey of India Reports*, vol. 4, edited by Alexander Cunningham (Calcutta, 1871–87), plate 12; for a sketch plan of the Rajmahal mosque, see Francis Buchanan Hamilton, *The History, Antiquities, Topography and Statistics of Eastern India*, 3 vols, ed. Montgomery Martin (London, 1838), vol. II, p. 70.
74. Smith, *The Moghul Architecture*, vol. IV, plate II.
75. This drawing is reproduced in Buchanan Hamilton, *Eastern India*, vol. II, p. 70.
76. Ibid., vol. II, p. 69, and L.S.S. O'Malley, *Santal Parganas (Bengal District Gazetteers)* (Calcutta, 1910), p. 276.
77. *Tūzuk*, vol. I, p. 137.
78. Abu'l Fazl, *Akbar Nāma*, vol. III, p. 1257; *Ma'asir*, vol. II, p. 54.

79. See Prasad, *Raja Man Singh*, pp. 122–9, for a general discussion of Man Singh's position under Jahangir and the Rohtas situation.
80. Muhammad Salih Kanbo, *'Amal-i Salih*, 3 vols (Lahore, 1967), vol. II, p. 153. I am grateful to Dr S.M. Yunus Jaffery for bringing this passage to my attention.
81. Ahmad, *Corpus*, pp. 186–7.
82. *Tūzuk*, vol. I, p. 138.
83. Ibid.
84. Mirza Nathan, *Baharistan*, vol. II, p. 765.
85. Prasad, *Raja Man Singh*, p. 126, states that Man Singh remained in Amber for nearly three years; however, he miscalculated his departure from Rohtas by about a year-and-a-half, see Ahmad, *Corpus*, pp. 186–7.
86. This inscription is now housed in the newly established Rajasthan State Museum in the Hawa Mahal, Jaipur. For a transcription and translation of the text, see Prasad, *Raja Man Singh*, p. 16. I visited Jamwa-Ramgarh in 1985 and found remains of a large fort-cum-palace stylistically belonging to Man Singh's time. See *Vanshavali*, pp. 2; 112 for the site's origins.
87. Prasad, *Raja Man Singh*, p. 16.
88. *Vanshavali*, p. 84.
89. Observed after elections in December 1984.
90. Bhakkari, *Dhakhirāt*, p. 106; *Ma'asir*, vol. II, p. 56.
91. According to Abu'l Fazl, *Akbar Nāma*, vol. III, p. 880, the land on which the Jagannath Temple stood was made crown land; it thus would follow that the temple there could be neither reconsecrated nor rebuilt without imperial permission.
92. *Tūzuk*, vol. I, pp. 7–8.

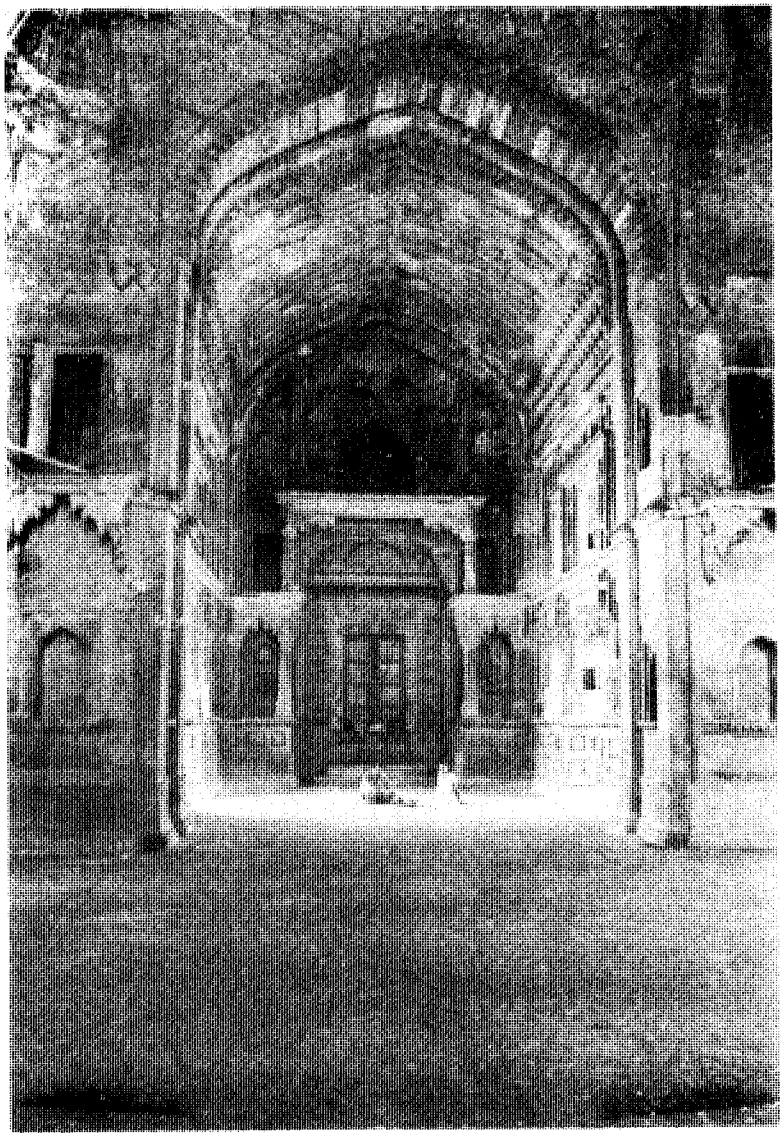


Fig. 1. Govinda Deva temple, Brindavana, 1590, interior view from east.

Photo: C. Asher

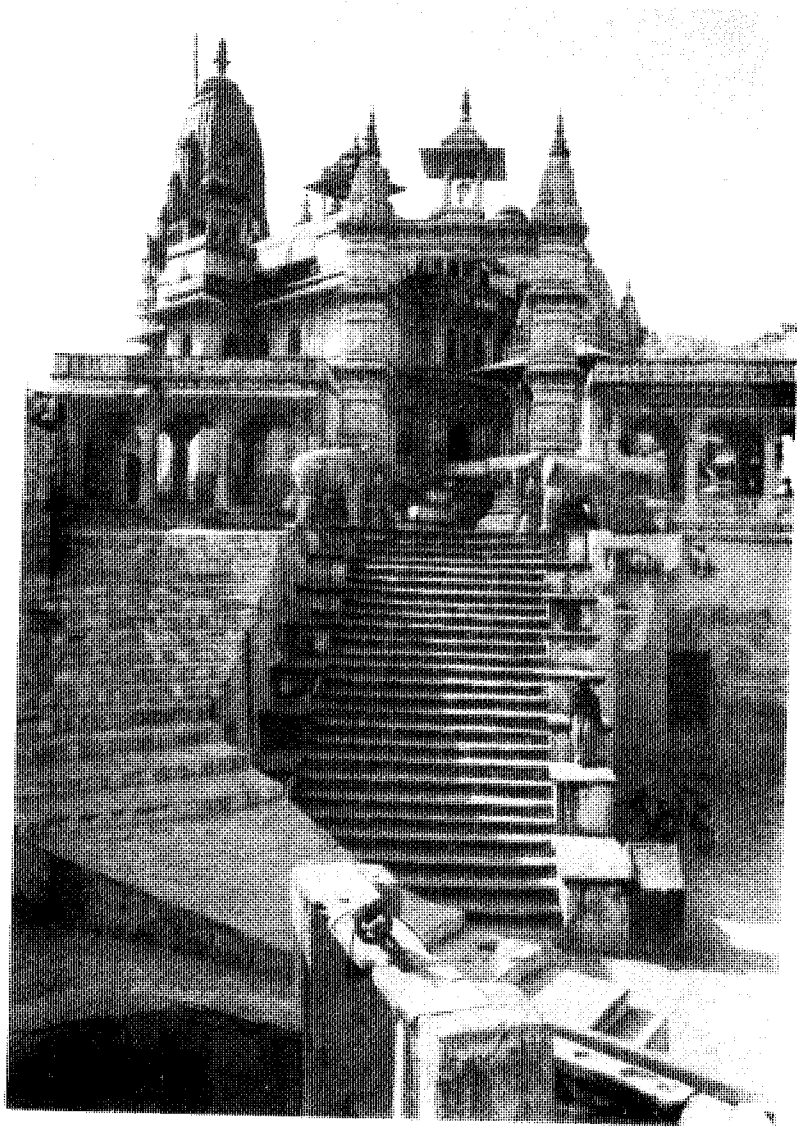


Fig. 2. Jagat Śiromaṇi temple, Amber, *c.* 1600.
Photo: C. Asher

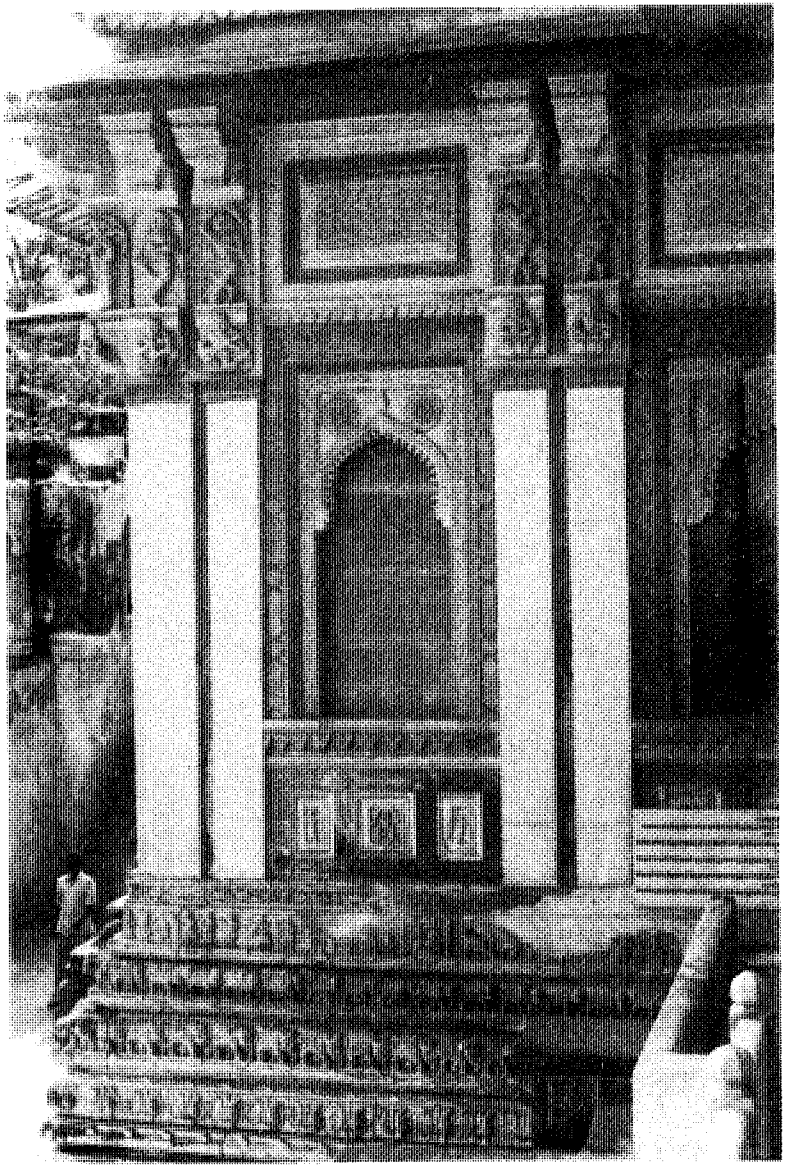


Fig. 3. Jagat Śiromaṇi temple, Amber, *c.* 1600, detail of exterior.
Photo: C. Asher



Fig. 4. Śiva Temple, Manpur, Gaya, late 16th century, view from north. Photo: C. Asher

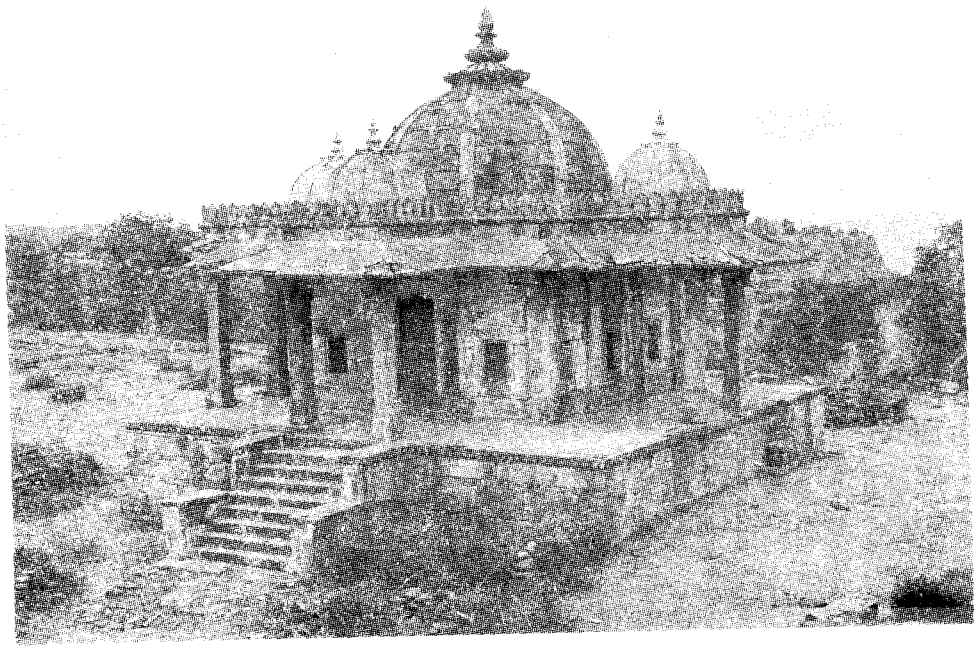


Fig. 5. Rohitāśva temple, late 16th century, structure added by Man Singh. Photo: C. Asher

CHAPTER II.6

Royal Architecture and Imperial Style at Vijayanagara*

GEORGE MICHELL



The courtly style of building which was evolved at Vijayanagara in the fifteenth and sixteenth centuries influenced the subsequent history of royal architecture in southern India. While there are no historical records to inform on the individual patrons or builders of these royal monuments, it is clear that these structures were intended to be used by the Vijayanagara emperor, his family, and those directly in his service. But this connection with the king and court extended beyond merely providing architectural settings for courtly activities, both public and private. The style in which these Vijayanagara structures were built was in itself an expression of the emperor and his ambitions. According to the interpretation presented here, the Vijayanagara royal monuments were active components in the formation of a specific royal ideology. They proclaimed the imperial intentions of the ruler and the cosmopolitan nature of the capital.

Royal architecture at Vijayanagara is more than a product of royal patronage; it is a means of defining the king's world. This perspective is derived from a formal analysis of the buildings, particularly the genesis and evolution of their architectural style. The data on which this analysis and interpretation is based refers to a much larger study of

*First published in Barbara Stoler Miller, ed., *The Powers of Art: Patronage in Indian Culture* (New Delhi, 1992), pp. 168–79.

Vijayanagara. This investigation is particularly concerned to document the archaeological and epigraphical data of this great imperial capital.[1]

Founded in the middle of the fourteenth century in the wake of the disruptive incursions of Muslims into southern India, the Vijayanagara capital was built up as a showpiece of imperial magnificence. The city was the dynastic seat of three lineages of powerful emperors over more than two centuries; here was focused the considerable economic and cultural resources of the empire. Surviving numerous siege and military attacks, Vijayanagara was eventually sacked by Muslim armies in 1565 after the catastrophic battle at Talikota. Thereafter, this capital was abandoned and the Vijayanagara emperors moved southwards, establishing themselves at Penukonda and then at Chandragiri.[2]

The first site chosen as the Vijayanagara dynastic centre was Hampi on the southern bank of the Tungabhadra river. This had been a holy spot of some antiquity, with some smaller Śaiva shrines dating back to the ninth century. At Hampi, the Vijayanagara rulers promoted the cult of Pampā, a powerful indigenous goddess, and her consort Virupakṣa whose sanctuaries were located here. Hemakuta hill above the Hampi shrine was fortified, and from here the kings ruled their rapidly expanding territories. Already by the beginning of the fifteenth century, the Vijayanagara rulers had moved their headquarters to a previously unoccupied zone, about 2.5 km south of Hampi. There they erected a smaller temple of Virupakṣa as well as an important sanctuary for the god Ramachandra. The latter monument was furnished with reliefs depicting both mythological scenes and regal processions. These temples formed the nucleus of what was to become the royal centre of the capital. This was not merely the residence of the king, court and military leaders, but also the setting for royal rituals that were of significance for the whole empire.

Today the royal centre preserves a number of irregular enclosures bounded by high tapering walls. Within these there are a number of standing and collapsing buildings, as well as buried structures currently being revealed by the excavators. Other than the temples already mentioned, there are several royal monuments constructed out of solid masonry. Other buildings of comparable scale preserve only their masonry basements; the upper portions have now vanished since these were of ephemeral materials. What is striking about the masonry monuments within the royal centre is their uniform stylistic features. While the identification of these buildings is problematic, their overall features are easily recognised.[3]

Perhaps the most obvious characteristic of these courtly monuments

is their apparent Islamic style. Here are seen arches with angled profiles or lobes, domes and vaults; these rise on square, rectangular and octagonal planes. Building surfaces are invariably coated with plaster, and there are traces of finely worked geometric and foliate ornament. On closer inspection, however, these Islamic-styled elements are seen to be modified by the intrusion of temple-like moulded basements, overhanging eaves and pyramidal towers. Evidently, the stylistic nature of these monuments is neither purely Islamic nor Hindu, but a distinctive blending of two different traditions. The creation of such an individual stylistic idiom must have been innovatory, since no two of these structures are identical in overall form; even so, they share common technical, formal and decorative features.

Among the more impressive Vijayanagara monuments belonging to this group is the water pavilion, sometimes known as the 'queens' bath', located in the southeastern corner of the royal centre. In the middle of this building is a square basin surrounded by an arched colonnade with balconies that project over the water. The interior is enlivened by arched bays, each of which is roofed with a dome or vault of different designs in elaborate plaster ornamentation. Originally, two pyramidal towers rose above the roof, but these are now lost. Nearby to the west, beside one of the roads leading into the royal centre, is a small octagonal pavilion containing a fountain. Arched openings on each side lead into a vaulted interior roofed by a dome.

North of this fountain, within one of the enclosures of the royal centre, are two of the best preserved royal structures. One of these is a two-storeyed, octagonal pavilion with two vaulted chambers one above the other. Arched openings of the exterior are sheltered by overhanging eaves; above is a shallow dome with a ribbed finial element. A staircase tower is attached to the northwest corner. Immediately east of this structure is a large square hall divided into nine bays and open to the north. While the exterior is severely plain, the interior has piers with arches that support vaults and shallow domes. Raised over the northwest corner of the enclosure to the north of these two structures is a pavilion with six bays. Four of these still preserve their shallow domes; balconies on corbels project outwards on two sides.

The next group of royal monuments to be considered is located within an enclosure commonly known as the 'zenana', despite the lack of any evidence to suggest that this was ever an abode of women. Built into the walls that define this enclosure are three towers; two are on a square plan while the third is octagonal. Arched openings light the internal

staircases which ascend to the uppermost chambers; these have projecting balconies with overhanging eaves. The uppermost chamber of the octagonal tower is surmounted by parapet elements and a capping roof form with a ribbed finial. In the northwest corner of the same enclosure stands an enclosed rectangular structure with a small doorway and several air vents. The exterior of this building is unadorned, except for the double-curved eave, parapet of pierced merlon-like motifs, and gabled roof executed entirely of masonry. The interior has a central area surrounded by a raised colonnade; the ceiling is supported on transverse arches with lobes. The enclosure is dominated by the two-storeyed pavilion known somewhat fancifully, and without any historical foundations, as the 'lotus mahal'. Laid out on a stepped plan with projecting bays in the middle of each side, this pavilion consists of two superimposed chambers, each with thirteen bays. A staircase tower is attached at the northwest corner. The exterior is relatively well preserved. Arched openings with lobes in three planes are surrounded by bands and medallions with plaster ornament. Here, stylised foliation mingles with geese, monster masks and naturalistic lotus flowers. Double-curved eaves shelter the openings at both levels. Above rise nine towers, each a pyramidal composition with diminishing tiers. The tower over the central bay dominates the elevation; its interior is hollow, providing a heightened vault over the central bay of the upper level.

Immediately east of the enclosure in which these latter monuments are located is an open space dominated by two large buildings. On the north is a rectangular structure, raised up on a high basement; an arcaded veranda on the south side overlooks the open space. Within is an open court surrounded by a colonnade with arched bays. It is, however, the long structure on the east side of the court that commands the greatest attention. This is the celebrated elephant stable, the largest monument in the series considered here. The stable is a long building consisting of a row of eleven square chambers, some of which are interconnecting. Each chamber is entered on the west through an arched doorway; above these rise plain and fluted domes as well as twelve-sided, multi-tiered vaults. These domes and vaults are symmetrically arranged. Over the central bay rises an upper chamber, now partly ruined, but originally provided with a pyramidal tower. While there are only traces of plaster ornamentation on the outer façade, the interior demonstrates a lively ornamentation with considerable variation.

Of the monuments on the peripheries of the royal centre, only one need be noticed here. This is an octagonal bath with a central water basin

surrounded by an open colonnade, now devoid of any plaster ornamentation. Yet other buildings are discovered further away. The best preserved is a U-shaped pavilion within the irrigated valley to the north. This consists of a number of bays separated by arched openings. Decorated vaults and domes are seen within the interior. The corbels projecting from the outer façade once supported an overhanging eave.

Having provided a brief description of the principal royal monuments at Vijayanagara, it is appropriate to consider, as far as it is possible, their functional attributes. The lack of relevant historical sources and epigraphs means that these monuments cannot be provided with a precise identification. Furthermore, it is unlikely that these buildings were ever restricted to a single usage; more likely, they housed a variety of activities. That these structures were intimately connected with the life of the king and court is indicated by their location within and immediately outside the enclosures of the royal centre. Here they are surrounded by the remains of accessary colonnades, entryways and residences; clearly, these royal buildings must be closely associated with the public and private activities of the ruler and those in his service.[4]

Some monuments are easily linked with the more pleasurable aspects of courtly life—the square water pavilion, octagonal fountain and octagonal bath, for instance. The two-storeyed octagonal pavilion may also have had more to do with recreation than security, positioned as it is within an enclosure, permitting views into adjacent zones. Other structures appear to have served as watch-towers; they are built into the corners of enclosure walls so as to overlook the roads leading into the royal centre.[5] Yet their elaborate designs suggest that they may have had more than mere utilitarian functions. The nine-bayed structure is in every respect like the prayer hall of a mosque, except that it faces north. But, like a mosque, it may also have housed groups of people on particular occasions; perhaps this was a place of reception. As for the two-storeyed 'lotus mahal' within the 'zenana' enclosure, this is most unlikely to have been a queen's palace. On the contrary, its proximity to the stable suggests that this pavilion may have been linked more with the ruler or his military commander than with women. It has also been labelled, perhaps more accurately, as 'sleeping apartments of the king' or 'council room'.[6] Residence and reception are not clearly distinguished here. Also to be mentioned is the U-shaped pavilion in the irrigated valley; this may have been associated with a prominent courtier.

The identification of the elephant stable is maintained, especially in the recognition of the significant role that these animals played in royal

ceremonies and military campaigns.[7] The open space in front of the stables was probably reserved for martial displays; if so, then the rectangular structure nearby would also form part of this complex. Its veranda overlooks the open space, while its interior court may have been the setting for athletic contests and mock battles. The rectangular, gable-roofed structure within the 'zenana' enclosure is devoid of any lighting; there is only access and ventilation. This building probably served as a store; perhaps it was the treasury of the king whose residence was in the adjacent 'lotus mahal'.

If there is uncertainty about the actual usage of these monuments, there can be little confusion about the style in which they are built. It has already been noted that particular features are Islamic-styled; these are derived from the Islamic architecture of the Deccan, in particular that of the early Bahmani period. Gulbarga, the first capital of the Deccan sultans, is almost exactly contemporary with Vijayanagara. The architecture preserved from the early Bahmani period at Gulbarga demonstrates the origins of many features observed in the Vijayanagara monuments.[8] To begin with, there is the characteristic masonry construction technique; here, roughly-shaped stone blocks are laid in thick mortar to create solid walls and roofs which are then concealed by finely finished plasterwork. Also found at Gulbarga are the typically angled arches of openings and wall recesses, multi-lobed arches, slightly tapering walls, parapets of merlons with corner finials, and flattish domes; all these features are known at Vijayanagara. So, too, are the bands of foliate ornament around the openings, and the medallions in the spandrels with geometric designs. That the influence of Islamic practice on Vijayanagara was limited to the early Bahmani period is indicated by the overall lack of stylistic connections between the architecture of the Hindu capital and that of the later Muslim Deccan sites. For example, the monuments at Bidar, the capital of the Deccan sultans after 1424, bear less relationship to Vijayanagara than those at Gulbarga.

But other than sultanate architecture, there are also other sources for Vijayanagara's courtly monuments, in particular the temple architecture that was adopted for large-scale sacred projects. However, this is also a non-local style since temple architecture of the Vijayanagara period was dominated by traditions deriving from the Tamil country. For instance, the Ramachandra temple within the royal centre, which is datable to the early fifteenth century, is obviously built in an imported style.[9] The overall features of this religious monument, including its sculptural and ornamental portions, are almost entirely modelled on late

Chola and Pandya period temple architecture of the south; they have almost nothing to do with previous Deccan practice. Architectural traditions of the Tamil country provide the sources for such typical Vijayanagara features as moulded basement, double-curved stone eaves on extended brackets, and parapets and superstructures of plaster-covered brickwork.

As mentioned already, courtly architecture at Vijayanagara is more than a mere assemblage of elements derived from different artistic traditions; it is in itself a distinctive and fully evolved artistic idiom. Nor is there any earlier evidence for this style at any other royal site in south India; thus it appears to have been invented at the Vijayanagara capital, no doubt under the direct sponsorship of the king and those around him. Regrettably, no evidence exists about actual patrons who may have commissioned these structures; not one of these monuments in the royal centre is provided with a donative inscription. Evidently there was no need for the king or those in his service to display evidence of sponsorship in this part of the capital. This is in striking contrast with the temples in and around Hampi where there is abundant evidence of epigraphs proclaiming exactly this sort of patronage.[10] Nor has any architect or workman left an identifying label on any of these courtly buildings.

As for the motivations of the sponsors who were responsible for these buildings, little information is gleaned from historical sources. However, the stylistic evidence of the monuments themselves suggests certain suppositions about patronage within the royal centre. Vijayanagara's courtly monuments should not be considered as products of an eclectic indulgence, reflecting the whim of the particular royal patron; nor should they be dismissed as eclectic follies, serving as picturesque adornments for pleasurable royal pastimes. Significantly, these monuments are powerful visual statements, as much an expression of the ideology and ambitions of the Vijayanagara kings as the fortifications and temples in the other parts of the capital. The aesthetic idiom evolved in these courtly buildings implies a cultural and political context that is an essential ingredient of the Vijayanagara capital and empire.

The incorporation of Bahmani period Islamic-styled elements into Vijayanagara's courtly architecture is not an isolated phenomenon; on the contrary, it is but one manifestation of a much broader process. By the beginning of the fifteenth century, the Vijayanagara emperors had consolidated their influence over almost all of the peninsular south of the Krishna river. Enacting traditional roles as 'world conquerors' (*chakravartin*), the Vijayanagara kings were largely successful in

expanding their political horizons. The imperial nature of their ambitions is recorded in numerous epigraphs and literary texts.[11] In their apparently ceaseless efforts to extend their area of influence, the Vijayanagara emperors came into conflict with Muslim expansionism. Despite obvious differences in religion and culture, such conflicts were largely territorial. But the spatial limitations of the northern boundaries of the empire were not necessarily reflected in the artistic and intellectual spheres. In fact, much of what is known about courtly and religious life at Vijayanagara indicates that this was both inter-regional and trans-cultural. This was true for the inhabitants of the city, which included populations from many parts of peninsular India, as well as Jains and Muslims. The last group was prominent in the king's army where it was employed for its superior skill in cavalry and, later, gunpowder. Languages, too, were also diverse; Telugu and Kannada literary works were commissioned at the capital, though Sanskrit continued to dominate the intellectual sphere. Even the cult deities that were worshipped in the city were diverse. Larger temple complexes housed different divinities that were patronised by the kings, while lesser sanctuaries were linked with a multitude of other gods and goddesses. Some of these shrines may have been erected by significant figures within the empire who were either present at Vijayanagara, or who wished to be represented there.

Of outstanding significance for urban life at Vijayanagara was the formation of state rituals which established the role of the city as an imperial capital. During the annual Mahanavami festival, for example, all of the lesser rulers, governors and military chiefs and deputies of the empire were compelled to assemble at the capital. Here they participated in rites and entertainments that affirmed the universal power of the Vijayanagara king.[12] Taxes, too, were paid to the king on this occasion, and there was the consecration of royal weapons as a prelude to warring campaigns. Muslim and European visitors were also present; their vivid chronicles provide first-hand information about this spectacular event.[13]

In many respects, then, Vijayanagara was the meeting place of different peoples, languages and beliefs. Such inter-regional and trans-cultural elements were essential in the transformation of the city into an imperial capital. But this also meant that there was no single race, literature or religion by which the capital—and, by extension, the whole empire—could be characterised. In this respect, architecture was to play a significant role. As the most enduring expression of royal ambition, an architectural style was developed for courtly monuments that came to be identified with both the capital and the empire.

Vijayanagara's courtly architecture is based upon the incorporation of different stylistic traditions. While no historical material is available to determine the meaning that such a process may have had for patrons at Vijayanagara, it is possible to speculate on how these sponsors may have viewed the architecture of their Muslim rivals. No evidence exists to suggest that territorial and religious conflicts were barriers to artistic taste in the fourteenth and fifteenth centuries. The appearance of early Bahmani features at Vijayanagara demonstrates an immediate attraction for Islamic-styled modes of architecture, elements of which were rapidly absorbed into Vijayanagara's own distinctive courtly idiom. Indeed, the Bahmani style was already visible at the capital, in the tombs that were built on the peripheries of the city, evidently commissioned by influential Muslims.[14] But if Bahmani architecture could not be described as 'foreign', it may well have been considered 'exotic', thus attracting the attention of the Vijayanagara builders.

While Muslims were able to build at Vijayanagara, it is not known if architects and craftsmen were imported from Gulbarga. In all likelihood, such artistic traditions were brought to Vijayanagara with Hindu or Muslim workmen who had previously been employed by Bahmani patrons. Yet, in their consistency of technique and form, these courtly monuments testify to a well-established, independent architectural tradition at the Hindu capital. The creation of entirely novel building types, unknown at Gulbarga or elsewhere, testifies to the inventiveness of architects at Vijayanagara. Encouraged by a particular royal patron, or perhaps responding to the broader political, cultural and religious movements that were focused on the newly founded capital, architects were able to invent a unique courtly style. Incorporation was the means by which this was achieved; the result was truly imperial. In terms of technique and form, this courtly style was essentially trans-regional and inter-cultural; in this sense it may be described as 'cosmopolitan', referring as it did to known styles both within and beyond the empire. This courtly idiom was actually an architectural expression of the same processes that may be observed in other aspects of contemporary life at the capital. Through the visual language of its forms, it signified the imperial taste and power of the Vijayanagara emperors.

That this architectural style was intimately identified with the dynasty is demonstrated by the courtly structures that were erected at all of the later Vijayanagara capitals. The masterpiece of the series still standing at Chandragiri is dated to the beginning of the seventeenth century.[15] But

the symbolic power of this courtly style as a means of signifying imperial might was to outlive the Vijayanagara kings themselves since it continued to evolve long after this dynasty of rulers had ceased to flourish. The palace architecture sponsored by the Nayaka kings of Thanjavur, Madurai and Gingee in the seventeenth and eighteenth centuries, for example, was obviously derived from Vijayanagara models. In this manner, architectural style was able to give effective expression to the ambitions of successive dynasties.

Notes and References

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3. These royal monuments are more fully examined in Fritz, Michell and Nagaraja Rao, *Where Kings and Gods Meet*, ch. 7.
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5. J. Fritz, 'The Roads at Vijayanagara', *Vijayanagara: Progress of Research 1979–83*, pp. 51–60.
6. These labels are found on the earliest maps of the city issued by Capt. Mackenzie in 1800, now in the India Office Library, and by the Madras Survey in 1880.
7. For the importance of elephants and the numbers that were actually used at this time, see S. Digby, *War-Horse and Elephant in the Delhi Sultanate: A Study of Military Supplies* (Oxford: Orient Monographs, 1971).
8. Architecture at Gulbarga is surveyed in *History of Medieval Deccan (1295–1724)*, eds. H.K. Sherwani and P.M. Joshi (Hyderabad: Government of Andhra Pradesh, 1974), vol. II, ch. IV (i). See also E. Merklinger, 'Gulbarga', *Islamic Heritage of the Deccan*, ed. G. Michell (Bombay: Marg Publications, 1986), pp. 26–41.

9. For a description of this temple see Fritz, Michell and Nagaraja Rao, *Where Kings and Gods Meet*, pp. 62–9.
10. S. Rajasekhara, 'Inscriptions at Vijayanagara', *Vijayanagara: City and Empire*, vol. I, pp. 101–19.
11. See, for instance, the inscription in which the Vijayanagara kings refer to themselves as 'fierce in war', 'victorious at the head of battle', etc. *Epigraphia Indica*, I, no. 42. Typical literary references are given in A. Rangasvami Sarasvati, 'Political Maxims of the Emperor-Poet Krishnadeva Raya', *Journal of Indian History*, IV (1926), pp. 62–88.
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13. These foreign accounts are compiled in Sewell, op. cit.
14. G. Michell, 'Architecture of the Muslim Quarters at Vijayanagara', *Vijayanagara: Progress of Research 1983–84*, pp. 101–18.
15. R.F. Chisholm, 'The Old Palace of Chandragiri', *Indian Antiquary*, XII (1883), pp. 295–6.

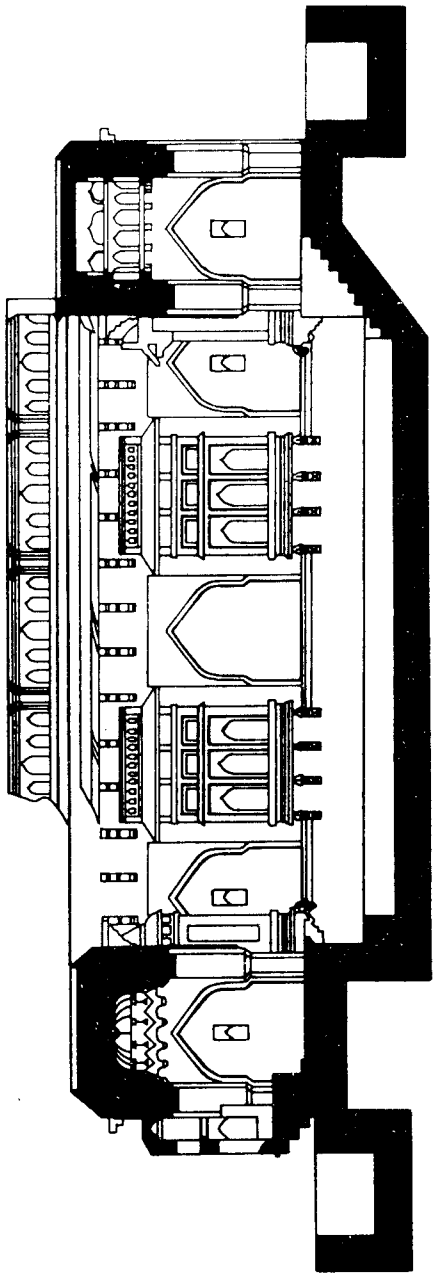


Fig. 1. Vijayanagara: Section through 'Queens' Bath'.

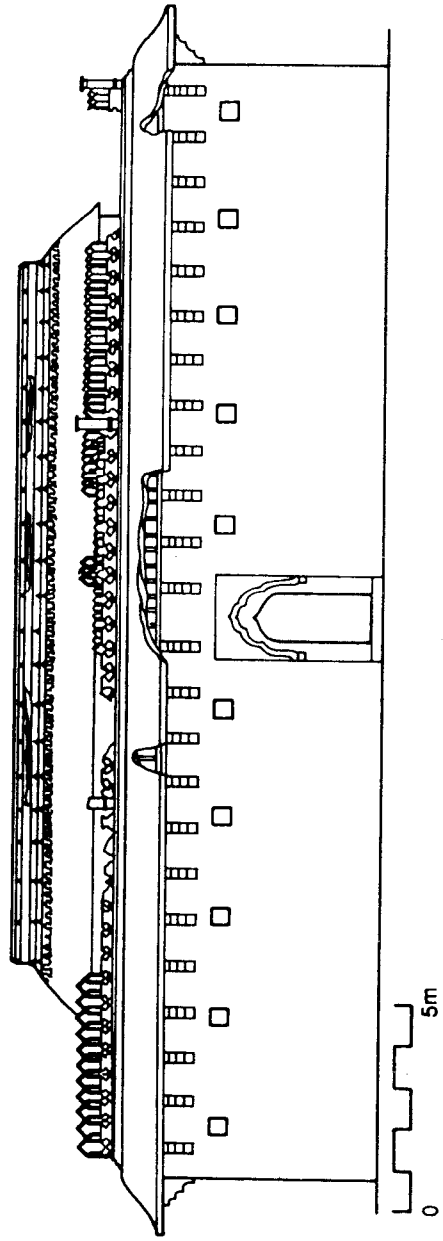


Fig. 2. Vijayanagara: Rectangular courtly structure.

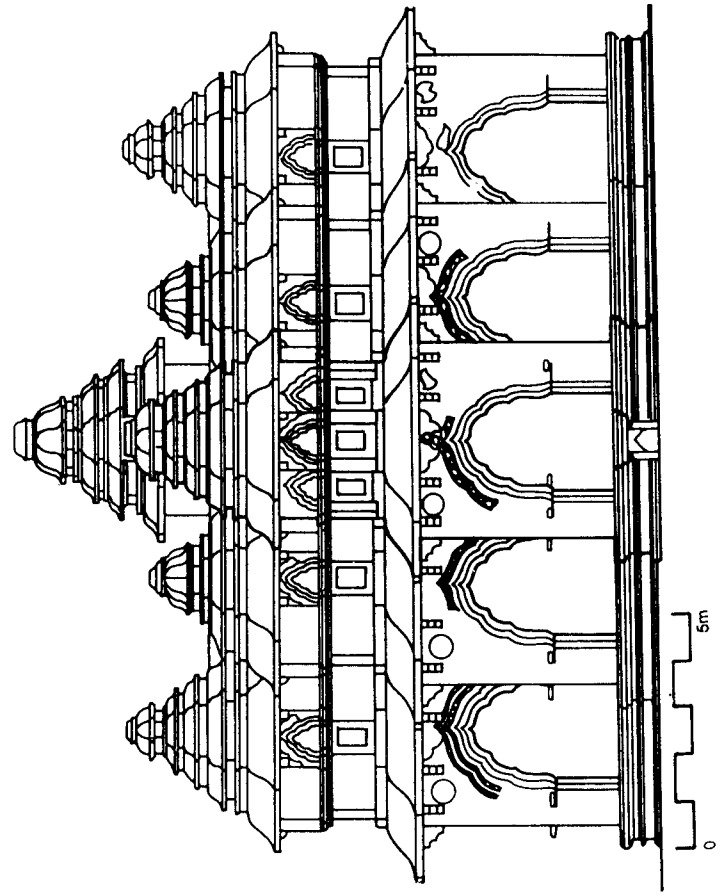


Fig. 3. Vijayanagara: 'Lotus Mahal'.

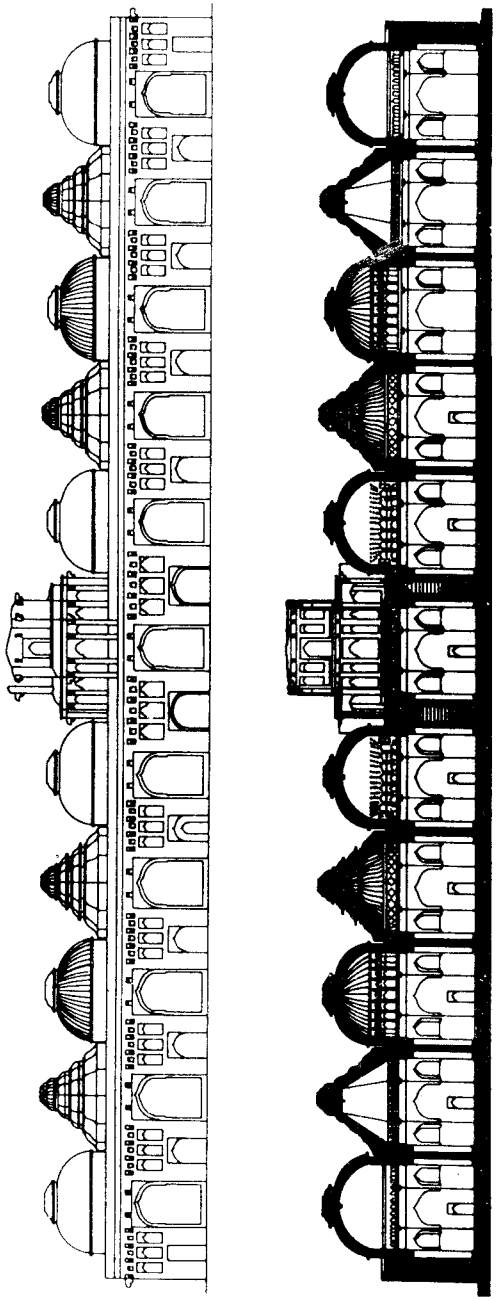


Fig. 4. Vijayanagara: Elephant stables, elevation and section.

CHAPTER II.7

The Architecture of Baha al-Din Tughrul in the Region of Bayana, Rajasthan*

MEHRDAD SHOKOOHY AND
NATALIE H. SHOKOOHY



'Malik Baha al-Din Tughrul was a personality of excellent disposition, extremely just, kind to strangers, and adorned with humility', according to the historian of the court of Delhi, Minhaj-i Siraj.[1] As Baha al-Din was not, so far as we can see, in favour at court, the historian's praise is surprisingly effusive. He continues his account as follows:

He was a slave of long standing of the victorious sultan (*sulṭān-i ghāzī*) Mu'izz al-din [Muhammad ibn Sam], who had brought him up and given him a good education. The fortress of Tahangar was in the territory of Bhayana [Bayana], and was part of the realm of the *rāi*.[2] When the sultan conquered it, he gave it to Baha al-Din, who made that territory prosperous. Merchants and men of distinction from different parts of Hindustan and Khurasan joined him, and he gave all of them houses and resources which were to be their own property, and for this reason they settled near him. As he and his army found the fort of Tahangar unsuitable, he built the town of Sultankut in the territory of Bhayana, and there made his abode. From there he sent groups of cavalry toward Galiwar [Gwalior], constantly, because when the victorious sultan [Muhammad ibn Samj] had returned from the foot of the fort of Galiwar he had commanded Baha al-Din Tughrul to take over that fortress. On this order Baha al-Din Tughrul stationed a troop of his army at the foot of the fort of Galiwar, then at a distance of two leagues he built another fort to house

*First published in *Muqarnas*, vol. 4, 1987, pp. 114–32.

the Muslim cavalry at night, and they attacked the fort every day. They continued in this manner for one year, and when the people of Galiwar were reduced to dire straits they sent emissaries to Sultan Qutb al-Din [Aybak], and surrendered the fort to him. There was a speck of the dust of vexation between Malik Baha al-Din Tughrul and Sultan Qutb al-Din. Malik Baha al-Din Tughrul was extremely benevolent, and in the region of Bhayana numerous beneficial monuments of his have remained. He died and was received into the mercy of the Lord.

Minhaj-i Siraj's description of Baha al-Din Tughrul is brief, but it makes some significant points. He tells us that Baha al-Din was operating in the region of Bayana under the direct orders of Muhammad ibn Sam, and that he was not only independent from Qutb al-Din Aybak, the sultan's commander in Delhi, but was his rival. This means that the surrender of the fort of Gwalior to Qutb al-Din must have taken place after the death of Muhammad ibn Sam, when Qutb al-Din was already the sultan of Delhi, as there is no record of Muhammad ibn Sam's having interfered in the matter. Minhaj-i Siraj's use of the title 'Sultan' for Qutb al-Din also helps assign a date to the event, as Qutb al-Din bore the royal title for only a little more than four years before he died in AD 1210–11. The date of Baha al-Din Tughrul's death is not recorded, but from the *Ṭabaqāt-i Nāṣirī* it appears that he predeceased Qutb al-Din. Baha al-Din's fiefship of Bayana therefore spanned the period AD 1195–1210, less than fifteen years.

Minhaj-i Siraj also tells us that several 'beneficial monuments' built by Baha al-Din remained in the region of Bayana. The expression he uses indicates that the monuments were of a religious nature, either mosques or the type of prayer wall on open ground called *namāzgāh*[3] in the early Sultanate period, but now known in India as an *idgāh*, and there are indeed two mosques and a prayer wall datable to this period within the old borders of the province of Bayana. One of the mosques is in the village of Kaman; the other mosque and the prayer wall are in the town of Bayana.

The mosque of Kaman, known locally as the Chaurasi Khamba (the Eighty-four Columns),[4] dates from the first two decades of the Ghurid conquest. It is a colonnaded building constructed around a central courtyard in an Arab type of plan. Its inscription is of particular importance as it throws light, not only on the origin of the building, but also on some obscure details of the history of the early Sultanate period. The inscription is carved around the rectangular doorway of the main entrance on blocks of sandstone reused from earlier buildings. It is badly damaged and only

some parts can be read.[5] When Cunningham[6] first reported the building in AD 1885, the inscription was already in poor condition. He could not read the date, but suggested that the damaged name of the sultan might be Iltutmish. In 1965 the *Annual Report of Indian Epigraphy*[7] mentioned the same inscription and gave its date as Ramadan 600 (May–June 1204), but noted that the name of the sultan was lost. In Ramadan 600, however, the ruler of Delhi was still Qutb al-Din Aybak, and he was still the governor of the region under Muhammad ibn Sam, so he would not have referred to himself as sultan. Iltutmish did not come to power until seven years later.

What actually remains of the inscription reads.

> . . . al-sulṭān [al]-'ālim al-'adil al-a'ẓam al-malik al-mulūk al-[tur]k al-['arab wa al-'ajam] [?] . . . [Bahā al-dawlat wa al-d]īn [?] . . . pādishāh wa al-sulṭān jahān pahlawān Ṭughrul al-sulṭānī wa amara bi binā' hādhā al-buq'at al-laṭif Īyāz ibn al-amīr Isfandīyār [?] al-sulṭānī . . .

The date no longer survives, but Jahan Pahlawan Tughrul al-Sultani—the title *al-sulṭānī* shows that he was a royal slave—seems to be none other than Baha al-Din Tughrul, the governor of Bayana. The surviving part of the sultan's title is similar to the titles used by all the early sultans of India, including Muhammad ibn Sam and Iltutmish.[8] However, the end of the title, *pādishāh wa al-sulṭān jahān pahlawān* before the name of Tughrul is especially worthy of attention since it suggests that at the time of the building of the Chaurasi Khamba mosque, Baha al-Din had declared himself an independent sultan. The mosque may therefore date from the short period of this independent rule after the death of Muhammad ibn Sam in AD 1206. The region of Bayana, which included Kaman, must have been annexed to Delhi when Iltutmish unified the whole of northern India under his empire.

The present town of Bayana is on the site of Sultankut, founded by Baha al-Din Tughrul on the western foot of a hill below the fort of Bayana. The fort had been the stronghold and capital of the Yaduvanshi Rajputs, who claimed descent from Krishna.[9] The town was later recorded by the early Muslim historians of India under the name Bhayana-Sultankut,[10] but subsequently the name Sultankut seems to have been abandoned, as both the fort and the town are referred to by later historians only as Bayana.

Bayana is located to the southeast of the state of Rajasthan, 70 kilometres east of Agra and 160 kilometres south of Delhi. The town was the only important staging post in this part of the route to the south, and

it was important for the sultans of Delhi to keep it under their control. After the death of Baha al-Din, Bayana appears to have been threatened by the local Rajputs, but was retaken by Shams al-Din Iltutmish,[11] and later many of the sultans of Delhi used the fort as their stronghold for campaigns against other states. From the time of Iltutmish until the fall of the Mughal Empire the town remained in the hands of the Muslims, and was part of the Delhi Sultanate. Firuz Shah Tughluq spent some time there,[12] and a fragmentary inscription mentioning his name has been found in a ruined mosque in the town.[13]

Bayana was not, however, always under the control of the Delhi sultans. After the death of Firuz Shah it fell into the hands of a powerful local family who were known as the Auhadis[14] after their ancestor Auhad Khan, an important governor of Bayana. They bore the title of *majlis-i 'ālī* ('of the noble assembly') and held Bayana mostly as independent rulers, but when necessary, as tributaries of the Delhi or Sharqi sultans, from about AD 1378 to the first quarter of the sixteenth century. Not until the time of the Lodis, after the defeat of Husain Shah Sharqi, was the Sharqi kingdom annexed to the territory of the Delhi sultans; Bayana then again became part of the Delhi Sultanate.[15] Sikandar Lodi (AD 1488–1518) made Khan-i Khanan Farmuli the new governor of Bayana[16] and built a new town there, which he called Sikandra[17] (not to be confused with the Sikandra near Agra). At the time of Ibrahim Shah, Bayana was the place of residence of one of his high-ranking generals, Haybat Khan. The *Tārikh-i Shāhī*[18] mentions that Haybat Khan was holding court in 'a garden in Sikandra near Bayana', and on one occasion he gave a generous offering to one of his court poets, known as Mu'min of Bayana.

After Sikandar Lodi developed Agra as his new capital, Bayana gradually lost its importance[19] until, under Akbar, it was reduced from a state to a district of Agra. According to the *Ā'īn-i Akbari*,[20] even at the time of Akbar, Fatehpur Sikri was not regarded as the capital, but only as one of the thirty-three towns of the district of Bayana. When the Mughal Empire broke up, the local Jat rulers made Bayana part of the kingdom of Bharatpur. It seems that only the town was used by the Jats. The fort is now totally deserted.

We know that in the early Sultanate period one of the towns under Bayana was Kaman, since apart from the inscription of Baha al-Din Tughrul, another inscription found in a reservoir there[21] mentions that it was restored by one Ibrahim Abubakr Nushirwan on the order of the *malik-i mulūk-i sharq* Nusrat Khan, the governor of the province of

Bayana during the reign of Balban, on the first day of Ramadan 669 (15 June 1271).

Today the village of Kaman is in the state of Rajasthan and the district of Bharatpur, 58 kilometres north-northwest of the town of Bharatpur. It is situated between Delhi and Bayana on the ancient route that connected Delhi with the south. Though now only a village, it was once a fortified city and probably one of some importance. Remains of the Gupta period found there[22] indicate that its history goes back to long before the Islamic conquest. At the time of the conquest it appears that the town fell into the hands of the Ghurids when the army marched toward Bayana and Ajmer. Kaman must have remained as part of the province of Bayana until Sikander Lodi developed Agra as his new capital and reduced the size of the district of Bayana by including the eastern part into the province of Agra. The *Ā'īn-i Akbari*[23] records Kaman as a town in the province of Agra during the reign of Akbar and indicates that no fortification existed there at that time, although in fact foundations of a large stone-built fortification wall are still visible. It can be assumed that this fortification wall had disappeared before Akbar's time.

The Chaurasi Khamba Mosque

The Chaurasi Khamba mosque is inside the area of the ruined fortification wall, to the west of the village. It is a colonnaded building measuring 36.58 x 24.24 m. built around a central courtyard and constructed on an Arab type of plan (Fig. 1).. The mosque has a *miḥrāb* in the centre of the western wall, a main entrance to the east, and another smaller entrance at the western corner of the northern wall which leads to the women's gallery, a small balcony in the northwest corner of the colonnade. The mosque is built out of reused materials from ancient Indian temples. The stonework is finely carved with garlands, rosettes, pot and foliage motifs, and figurative designs. Some of the last have been defaced, and a number of column shafts are upside down. The colonnade is walled on the southern and on the *qibla* sides, as well as on the northwest corner of the western wall, which encloses the *qibla* colonnade and the women's gallery. The walls are built of reused blocks of mixed red and grey sandstone laid in courses. The rest of the northern side and the eastern side are unusual in that they share a raised platform 1.76 m. high with two rows of columns built on it. A reused monolithic column shaft forms each of the columns in the colonnades. Eave stones, many now missing, have been set in the reconstructed upper part of the walls.

The mosque has twice been restored. In the first restoration parts of the walls and the parapets were repaired with stone rubble set in mortar, and in the second the upper parts of the walls and parts of the parapet were reinforced by brick faced with sandstone. Both restorations were minor, however, and, except for the main entrance gateway, do not affect the original appearance of the mosque (Fig. 2).

The gateway is entered from the east, and projects out on the exterior to form a chamber with thick walls and heavy piers. The piers appear to be original, but the upper part of the walls and the roof have been reconstructed. The reconstruction includes the two shallow four-centred arches over the threshold leading to the chamber. The profile of the arches suggests that they must be of the Mughal period. The threshold leads to the chamber, the floor of which is three steps lower than the present ground level (the steps themselves are now broken). On the opposite side of the chamber is the entrance to the mosque; it has kept its original rectangular form. Above the doorway are two reused monolithic slabs carved to form a row of miniature shrines. The stonework around this entrance has been re-dressed and carved with the inscription already mentioned. In the north and south walls of the gateway are two flights of steps leading from the colonnade of the mosque to the roof of the gateway.

Inside the walls and the raised platform is the main colonnade of the mosque, which consists of one aisle and eight bays on the north and south sides of the courtyard (Fig. 3). The columns on the south side do not line up with those of the raised platform, which are more closely spaced and produce eleven bays. The eastern colonnade is two aisles deep and seven bays wide, and that on the *qibla* side is three aisles deep and seven bays wide (Fig. 4). As in the mosque of Quwwat al-Islam in Delhi,[24] the columns are each formed out of two reused monolithic column shafts placed one on top of the other to give the required height. The interior of the southern wall has three rectangular niches.

The main *miḥrāb* set in the centre of the *qibla* wall is rectangular in plan and projects behind the back wall. It has a slightly ogee two-centred arch framed by an inscription bearing Qur'an 68.1-5. The inside of the arch is carved with a border decorated with a pierced scroll motif, which is now badly damaged, supported by vase-shaped capitals that originally rested on pilasters, which are now lost. The spandrels of the arch are inscribed with the Muslim profession of faith. One of the four slabs of stone used for the back wall of the *miḥrāb* has been replaced by later brickwork restorations. The stones are carved to represent an arch with pilasters and a carved border, imitating the design of the real arch. The carved decoration of the *miḥrāb* was all executed specifically for it. The same designs appear on the *miḥrāb* of the mosque in Bayana.

To the right of the *miḥrāb* is a stone *minbār* (Fig. 5). It has a flight of steps leading to a platform, with a passage underneath. The blocks of stone chosen come from a former temple, but the way in which they have been set—in three registers standing alternately in recess and relief between four longer horizontal slabs—appears to be an imitation of the wooden *minbār*s common in Iran during this period, such as that of the mosque of Na'in.[25] The back wall of the platform has an arch-shaped back-rest, and over the platform is a carved stone canopy made out of a carefully reassembled Indian dome with a lotus motif on the underside. No balustrade remains. The reused stones of the *minbār* are so like those of the mosque as to suggest that both were salvaged from the same temples, and therefore that both were built at the same time. The *minbār* is the only existing example dating from the early Islamic period in India—no trace of any *minbār* survives in the mosque of Quwwat al-Islam at Delhi or in the mosque of Arhāi din ka Jhonpra at Ajmer.[26] Since a *minbār* is one of the liturgical requirements of a mosque, all early mosques must have had one. The unique *minbār* of the Chaurasi Khamba therefore gives us some idea of what the early *minbār*s must have looked like. Originating from the wooden *minbār*s of Iran, they were executed in India in stone and perhaps in other materials.

In the north-western corner of the *qibla* colonnade is a women's gallery (Fig. 4), supported on four columns and originally screened from the general gaze by pierced stonework screens known in India as *jāli*. The stone screen is now lost, but slots in the lintels around the gallery show how it was fixed there. The women's gallery has its own small undecorated *miḥrāb*. The gallery is entered from the outside (Fig. 3) by a flight of steps in the western corner; the landing at the top has a pierced stonework screen and a flat roof supported by columns and lintels. Two of these columns rest on bases made from reused capitals; their carved decoration includes elephants' heads.

The mosque is roofed by stone slabs resting on lintels, but the northern gallery has no cross lintels. In front of the *miḥrāb* is another small corbelled dome, reassembled and retaining its original carving. There are eave stones around the inside of the colonnade, but like those of the exterior of the mosque they are set in rubble and brick, and are a later addition. Most of another addition—a parapet formed of rubble and brick and faced with stone carved to represent a row of arches in the form of battlements—is now missing.

The Chaurasi Khamba is the only extant early Sultanate mosque

which has retained all its original features. Situated in a provincial town, it was built on a fairly modest scale and was not lavishly embellished. Although it lacks the decorative screen wall and minaret found in the Quwwat al-Islam and Arhāi din ka Jhonpra, its intact colonnade in Arab plan, its elaborately decorated *miḥrāb*, and its unique *minbār* nevertheless combine to provide an excellent example of a mosque of the period.

The Mosque of Ukha Mandir

The two other buildings which appear to be associated with Baha al-Din Tughrul, in the town of Bayana where he was governor, are a mosque converted to a temple and known as the Ukha Mandir, and a prayer wall (*'idgāh*), built outside the town.

The Ukha Mandir,[27] a large mosque situated to the west of the town, is part of a complex which includes an extension dating from AD 1320 known as the Ukha Masjid, and an unfinished *minār* dated AH 926 (AD 1519–20) and known as the Ukha Minār (Figs 6, 7, 8).

The original part of the mosque of Ukha Mandir has an Arab type of plan and is constructed of sandstone blocks and materials reused from earlier temples. It is a colonnaded building, measuring 37 x 37 m.; originally it was walled on its north, south, and west sides and left open on the east, where there is a monumental entrance gateway. In the north-western corner of the colonnade is a women's gallery in the form of a balcony with its own separate entrance. There is also a small doorway to the mosque in the northern wall and windows in both the northern and western walls. The northern doorway and most of the windows are now blocked. There are three *miḥrāb*s in the main part of the mosque and a fourth in the women's gallery. The conversion of the mosque to a temple appears to have taken place more than two centuries ago and has superficially altered the appearance of the building. Parts of the colonnade have been walled up, and the eastern side is no longer open, but has a roofed portico. Platforms have been built under the north, south, and *qibla* colonnades, and between the columns facing onto the courtyard a series of lobed arches have been inserted. However, these later additions have not disturbed the original structure, most of which is still visible.

The main gateway has kept all its original features. Like the rest of the mosque, it is built of red sandstone blocks. It has a corbelled arch built in the same manner as those of the screen walls in the mosque of Ajmer and Delhi — a form used only in the early years of the Sultanate

[illegible] the arch the gateway is divided into two tiers: the lower [illegible] roofed passage leading to the entrance doorway; the upper tier [illegible] window with a pierced stonework screen, and in front of it a bal- [illegible] which corresponds to the level of the roof of the mosque. The flat [illegible] the passage is supported by two stone lintels standing on cor- [illegible] brackets, and a chamber has been built on the roof of the passage [illegible] behind the window of the upper tier. This chamber is a later cons- [illegible] however, probably built at the time of the conversion of the [illegible] to the temple, and perhaps replacing an earlier chamber with [illegible] through the surviving window. Above the doorway to the mosque [illegible] remnants of an almost obliterated two-line inscription can be seen [illegible] not read. It must have been defaced sometime before AD 1871 when [illegible] first visited the building, as he makes no mention of it.

As in the Quwwat al-Islam and the Chaurasi Khamba, so in the mos- [illegible] of Ukha Mandir each of the columns of the colonnade is formed of [illegible] reused monolithic column shafts placed one on top of the other. The [illegible] is made from slabs of stone resting on lintels supported by brackets, [illegible] with one small corbelled dome, reconstructed from an earlier building, [illegible] in front of the central *miḥrāb*.

The central *miḥrāb* is rectangular in plan, and projects from the back [illegible] wall. It has a two-centred arch carved out of a large slab of stone and [illegible] a pierced scroll motif very similar to that of the *miḥrāb* of the Chaurasi Khamba. This *miḥrāb* also had carved engaged columns, now broken, below the imposts of the arch, and again as in the Chaurasi Khamba the back wall has carved decorative pilasters and a border carved with a scroll motif. The inscription of the central *miḥrāb*, like that of the entr- [illegible] ance, has been defaced, but the fine decorative carving remains. The two [illegible] smaller *miḥrāb*s on either side of the central one are also rectangular [illegible] in plan, but do not project from the outside. They are elaborately carved [illegible] and have roundels on the spandrels and in the wall behind, but no pierced [illegible] decoration. There is now no *minbār* to be seen and no indication whether [illegible] the one that once must have existed was constructed of stone or of wood.

The women's gallery in the northeast corner of the *qibla* colonnade [illegible] is built on slabs of stone resting on lintels supported by columns and [illegible] brackets. Column shafts standing on the platform support the roof, and [illegible] the balcony is screened from the mosque by pierced stonework; similar [illegible] screens were used to let in light from the outside through two windows, [illegible] now blocked. The original entrance to this gallery was from the outside [illegible] via a flight of stone steps built into the north wall. This entrance has been [illegible] blocked, and access to the gallery is now from steps inside the mosque,

through a new opening in the screen. These reconstructions again seem to be part of the conversion, but the secluded area, with its own *miḥrāb*, is otherwise in its original state.

The exact date of the construction of the mosque of Ukha Mandir is not known; no dated inscription or other source providing a date has survived. Its extension, known as the Ukha Masjid, is dated AH 720 (AD 1320–1); since the original building must be earlier, it was presumably built sometime in the thirteenth century. The construction of the gateway of the Ukha Mandir is similar to that of the screen walls at Ajmer and Delhi. The similarity of the *miḥrāb* to that of Kaman is another indication of an early date. This suggests that the building must have been constructed at the time of Baha al-Din Tughrul who may have built it as the *jāmi' masjid* for his new town of Sultankut.

The extension, the Ukha Masjid,[28] is attached to the south side of the original mosque. It was once connected to its colonnade through a doorway, but this is now blocked. The extension is also a colonnaded building on an Arab plan. Its general layout follows that of the Ukha Mandir, but the extension is narrower, measuring only 19 x 37 m. The eastern elevation of the building, although different in its detail, corresponds broadly with that of the Ukha Mandir, and consists of a monumental gateway flanked by open colonnades. The gateway consists of an arch leading to a doorway into the colonnade, and is ornamented with two small turrets, only the bases of which remain. They are stellate in plan, imitating on a smaller scale the form of the Qutb Minār, and are similar to the turrets of the screen wall of Arhāi din ka Jhonpra. Inside the mosque and in front of the entrance are two columns larger in size than the rest, which support reused carved serpentine brackets that still retain their figurative decoration (Fig. 9).

Above the doorway of the entrance is an inscription. It was defaced during the disturbances of 1947, but had earlier been recorded.[29] According to that record, the inscription said that the extension was built by Kafur al-Sultani, the governor of the town, in the year AH 720 (AD 1320–1), during the reign of the Khalji Sultan Mubarak Shah.

Like the Ukha Mandir, the Ukha Masjid has a colonnade built of reused materials, but the column shafts of the *qibla* colonnade, used one on top of the other to support the high ceiling, have been re-dressed. The north, south, and east colonnades have an upper level, which was probably used as a women's gallery. The mosque also features some more advanced methods of construction which were in common use during the early fourteenth century. These include the four-centred true arch

of the gateway, and the small dome in the roof in front of the central *miḥrāb*. The latter is set in a position similar to that in the Ukha Mandir, but rather than being corbelled, it is a true ribbed dome, a type unknown in India in the early Islamic period.

The central *miḥrāb* projects from the back wall; it has a finely carved lobed arch shaped out of large blocks of stone, and it also once had an inscription, but it is now defaced and illegible. The two smaller *miḥrāb*s on either side of the central one have true arches, slightly ogee and two-centred. When the extension was built the wall of the original building was opened to make a connection between them. An arched window with a pierced stonework screen was placed between the two *qibla* colonnades. Both the door and the window line up with the colonnade of the extension.

The Ukha Minar[30] is a separate circular minaret 9.5 m. to the northeast of the mosque (Fig. 10). According to an inscription above its entrance,[31] it was constructed during the reign of Ibrahim Shah Lodi in AH 926 (AD 1519–20) by Nizam Khan ibn Mujahid Khan, the governor at that time. It is circular in plan, and stands on an octagonal foundation. The entrance faces southeast and leads to a spiral staircase which was to reach to the top of the minaret. The minaret was, however, only built up to the base of the first balcony, and must have been left unfinished when Babur attacked the region.

The 'Idgāh

The Idgāh, a prayer wall about 60 m. long built of reused blocks of sandstone laid in courses, is located one kilometre northwest of the town (Fig. 11). It has a central *miḥrāb* flanked by four smaller niches on either side, with a tower at each end of the wall and a large platform in front. Prayer walls of this kind, suitable for large open-air gatherings, are common in India. They remain a normal feature of any town with a Muslim community, and new ones continues to be built even today. The word *'idgāh* means 'a place for festivals', and one of their functions is to provide a place of assembly where all the Muslims of a whole town can gather together.

How the custom of using a prayer wall as a mosque originated is not clearly known, but prayer walls appeared in India as early as the beginning of the Islamic conquest, and *'idgāh*s bearing inscriptions dating back to the time of Iltutmish existed in India until recent times.[32] No such walls existed in Khurasan or elsewhere in the Islamic world before the

fourteenth century, but the remains of a mosque uncovered at the camp (*lashkargāh*) of the Ghaznavid Sultan Mahmud and his son Mas'ud in Lashkari Bazar[3] near Bust in Afghanistan may provide some information on Indian *'idgāhs*. This mosque consisted of an arcade with a central *iwān* at the *qibla* side of the large open space, and was apparently used by the Ghaznavid army encamped there. It does not appear to have had any entrance or enclosure wall, but only a *qibla* wall under the arcade, with a *miḥrāb* in the centre. In large assemblies the sultan and the commanders of the army presumably stood in the shaded space under the arcade and its *iwān*, with the rest of the army gathered behind them in the open. The Ghurids may have adapted the idea when they came to India. In any town they conquered they could quickly build a prayer wall in an open field to use for religious observances involving the whole army.

The *'idgāh* of Bayana consists of a central *miḥrāb* set in a square recess which projects behind the back of the wall, flanked by four smaller niches on either side and two round towers, one at either end of the wall. The recess of the central *miḥrāb* is in the form of a square chamber roofed by a corbelled dome. A flat *miḥrāb* is carved on the *qibla* wall to represent a lobed arch in a larger two-centred arch, with roundels in the spandrels and under the arch. A border of floriated serpentine decoration closely resembles the pattern carved on the part of the screen wall of the Quwwat al-Islam built by Qutb al-Din Aybak. The stones are reused materials from earlier temples, but the surface has been re-dressed and the decoration carved specifically for this building. In front of the *miḥrāb* is a corbelled arch standing on two round columns taken from an older building.

Eight niches, four on each side of the *miḥrāb*, are all of the same form and have corbelled arches built in the same way as the central *miḥrāb*. In this case, however, they are carved to represent the form of a lobed arch within a four-centred arch. The lobes follow the horizontal lines of the stonework, producing an effect very different from the lobed arches executed in brickwork and imitated in stonework that are found in early Indo-Islamic buildings (including the central *miḥrāb* of this one). The niches are now surmounted by battlements in the form of pointed arches, which also function as weights to hold the blocks of corbelled stone of the niches in place. These battlements may be a later addition, as it appears that some upper courses of the wall have been restored. The present *minbar* is not the original one; it has been improvised out of three blocks of stone placed to the right of the central *miḥrāb*. Traces of an earlier *minbar* can still be seen beside it on the wall.

The round towers at each end of the wall serve not only to support the façade but also to strengthen the structure at the corners. Each tower has a round chamber with a door to the east. The chamber of the northern tower is now filled with stone and its door blocked, apparently to make the tower more rigid, but the southern chamber is still accessible. On the northern side of this chamber is a flight of steps leading to the top of the wall, which may have been used by the *muʾadhdhin*, or caller to prayer. Both towers were originally roofed with corbelled domes, but they have long since disappeared. On their base ring other domes were later built, but these too have collapsed.

The *'idgāh* of Bayana has the characteristics of an early Indo-Islamic building, including a corbelled dome and corbelled arches. As true arches and domes were built in Bayana as early as AD 1320, we can assume that this building pre-dates that time, for craftsmen would be unlikely to have abandoned a new and successfully used technique for a less advanced one when constructing a sizeable building. The *'idgāh* which thus far seems completely to have escaped the attention of scholars) must therefore date from the time when Bayana was under the control of Baha al-Din Tughrul, and perhaps from the earliest stage of the construction of Sultankut. If so, the *'idgāh* would be one of the first of the buildings mentioned by Minhaj-i Siraj to have been constructed by Baha al-Din in Bayana, and the earliest example of its kind still standing. The combination of a larger arch for the central *miḥrāb* and smaller niches on either side in the *'idgāh* of Bayana is reminiscent of the form of an arcade with a central *iwān*. The effect it produced must have been to the Ghurid taste, for it also appears in the screen walls added to the Quwwat al-Islam in Delhi and to Arhāi din ka Jhonpra in Ajmer.

Notes and References

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2. The Persian form of the Sanskrit word *rai*, the title of the Indian kings.

3. The word appears in the inscriptions of early prayer walls such as that of Jhalor dated AH 718 (AD 1318–19); see *Epigraphia Indica, Arabic and Persian Supplement* (henceforth cited as *EIAPS*), 1972, pp. 12–19.
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5. Mehrdad Shokoohy, *Islamic Inscriptions of Rajasthan 1* (Corpus Inscriptionum Iranicarum), pt. 4, vol. 49 (London, 1986), pp. 50–3.
6. *ASIR* 20, pp. 54–60.
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8. J. Horovitz, 'The Inscriptions of Muhammad ibn Sam, Qutbuddin Aibeg and Iltutmish', *Epigraphia Indo-Moslemica*, 1911–12, pp. 15–34.
9. A.C.L. Carlleyle, 'Report of a Tour in Eastern Rajputana in 1871–2 and 1872–3', *Archaeological Survey of India Reports 6*, 1878 (henceforth cited as *ASIR* 6), p. 54.
10. Minhāj-i Sirāj, *Ṭabaqāt-i Nāṣirī*, p. 296.
11. Muhammad Qasim Hindu Shah, *Tārikh-i Firishta*, vol. 1, p. 66.
12. Shams-i Sirāj 'Afīf, *Tārikh-i Firūz Shāhī* (Calcutta, 1890), p. 185.
13. *EIAPS*, 1967, pp. 24–5.
14. The historians of the court of Delhi only refer to the Auhadis when they were directly involved in the affairs of the Delhi sultans. See Yaḥyā ibn Aḥmad ibn 'Abdullāh al-Sirhindī, *Tārikh-i Mubārak Shāhī* (Calcutta, 1931), pp. 169–73, 185–7, 202–15, 237–42; 'Abd al-Qādir ibn Mulūk Shāh al-Badāunī, *Muntakhab al-Tawārīkh*, vol. 1 (Calcutta, 1868), pp. 272–4, 282–316. For modern studies on the history inscriptions of the Auhadis, see Cunningham, *ASIR*, 20, pp. 61–7; A. Halim, 'Some Minor Dynasties of Northern India during the Fifteenth Century', *Journal of Indian History*, vol. 26, no. 3, December 1949, pp. 223–33; Shokoohy, *Rajasthan 1*, 15–16.
15. Aḥmad Yādigār, *Tārikh-i Shāhī* (Calcutta, 1936), pp. 36–7.
16. Muhammad Qāsim Hindu Shāh, *Tārikh-i Firishta*, vol. 1, p. 180.
17. Sikandra of Bayana is located three miles east of the town and on the plain to the southeast of the fort. See map of Dholpur Region, no. NG 43–8, published by the U.S. Army map service, Washington, D.C., 1968.
18. Ahmad Yadigar, *Tārikh-i Shāhī*, pp. 109–10.
19. Abu'l Fazl 'Allami, *Ā'in-i Akbarī*, ed., H. Blochmann, vol. 1 (Calcutta, 1877), p. 441.
20. Ibid., p. 356.
21. G. Yazdani, 'Inscription of Sultan Balban from Bayana, Bharatpur State', *Epigraphia Indo Moslemica*, 1937–8, p. 5.

22. R.D. Banerji, *Progress Report of the Archaeological Survey of India, Western Circle*, 1919, pp. 64–5.
23. Abū'l-Faẓl 'Allāmī, *Ā'īn-i Akbarī*, vol. 1, pp. 357, 455.
24. A full survey in J.A. Page, 'An Historical Memoir on the Qutb, Delhi', *Memoirs of the Archaeological Survey of India*, 22, 1926, reprinted in this volume. See also Maulavi Muhammad Ashraf Husain, 'Record of All the Quranic and Non-historical Epigraphs on the Protected Monuments in the Delhi Province', ibid., 47, 1936, pp. 96–118.
25. Arthur Upham Pope, *A Survey of Persian Art* (London, 1964–5), vol. 8, p. 265.
26. Surveys in A. Cunningham, *Archaeological Survey of India Reports*, 2, 1871, pp. 259–63; 23, 1887, pp. 34–8; James Fergusson, *History of Indian and Eastern Architecture* (London, 1876), pp. 510–13; revised edn by J. Burgess, vol. 2 (London, 1910), pp. 210–11.
27. For previous reports, see Carlleyle, *ASIR* 6, 1878, pp. 50–1, plates 4–6; Cunningham, *ASIR* 20, p. 71; John Marshall, 'The Monuments of Muslim India', *Cambridge History of India*, ed. Wolseley Haig, vol. 3 (Cambridge, 1928), p. 622.
28. Cunningham, *ASIR* 20, pp. 71–2; unusual for Cunningham, his plan (plate 13) is incorrect. It shows an additional row of columns forming a second aisle open to the outside on the north, where in fact there is a single aisle closed by the party wall with the Ukha Mandir. His description of the building reflects the incorrect drawing. The drawing shows only one of the three *miḥrab*s.
29. Ibid., p. 72.
30. *ASIR*. 6, p. 51; ibid., 20, pp. 73–4.
31. Ibid., Shokoohy, *Rajasthan*, pp. 21–2.
32. Horovitz, 'Inscriptions of Muhammad ibn Sam', p. 28. Horovitz reports an *'idgāh* in Hansi built on the order of Abu al-Fath Mahmud ibn Iltutmish when he was the governor of the region. Mahmud died during the lifetime of his father and was buried in Delhi in the tomb now known as Sultan Ghari. The *'idgāh* of Hansi was damaged at the time of partition [1947], when all the Muslims left the area. Over the years its stones were used for building new structures, and by 1981 when we surveyed the Sultanate remains in Hansi, only a foundation trench about 1.50 m. deep remained where the last blocks had been unearthed. From the trench the general layout of a freestanding wall with a central *miḥrāb* and a tower at each end could be established.
33. Daniel Schlumberger, *Lashkari Bazar*, vol. 1A (Paris, 1978), pp. 67–9, plates, 23, 93–6.

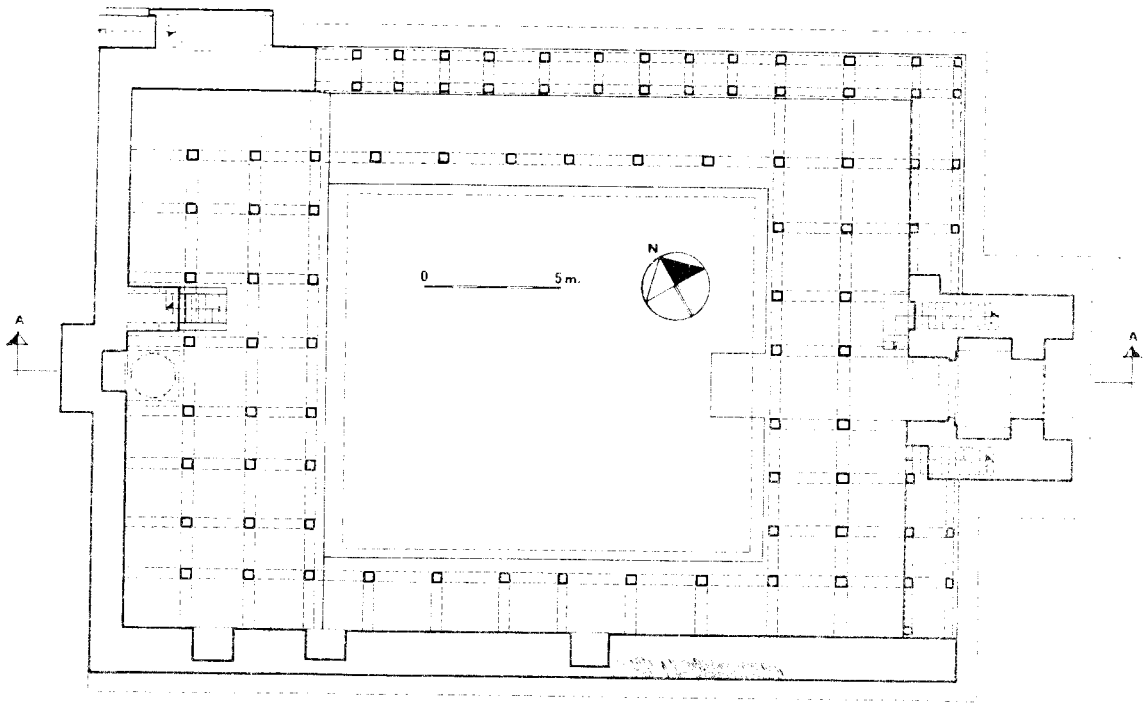


Fig. 1. Kaman, Chaurasi Khamba Masjid, ground plan.



Fig. 2. Kaman, Chaurasi Khamba Masjid, view of eastern elevation showing main entrance gateway.
Photo: M. Shokoohy

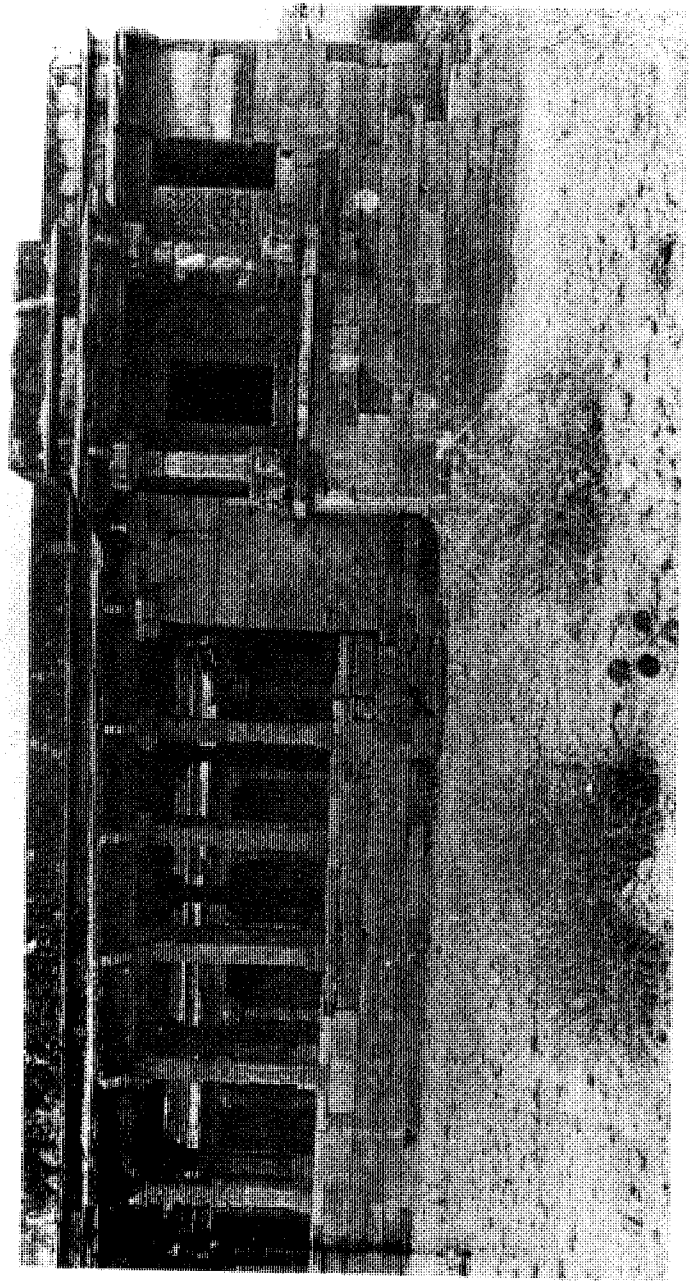


Fig. 3. Kaman, Chaurasi Khamba Masjid, exterior view of western end. Photo: M. Shokoohy

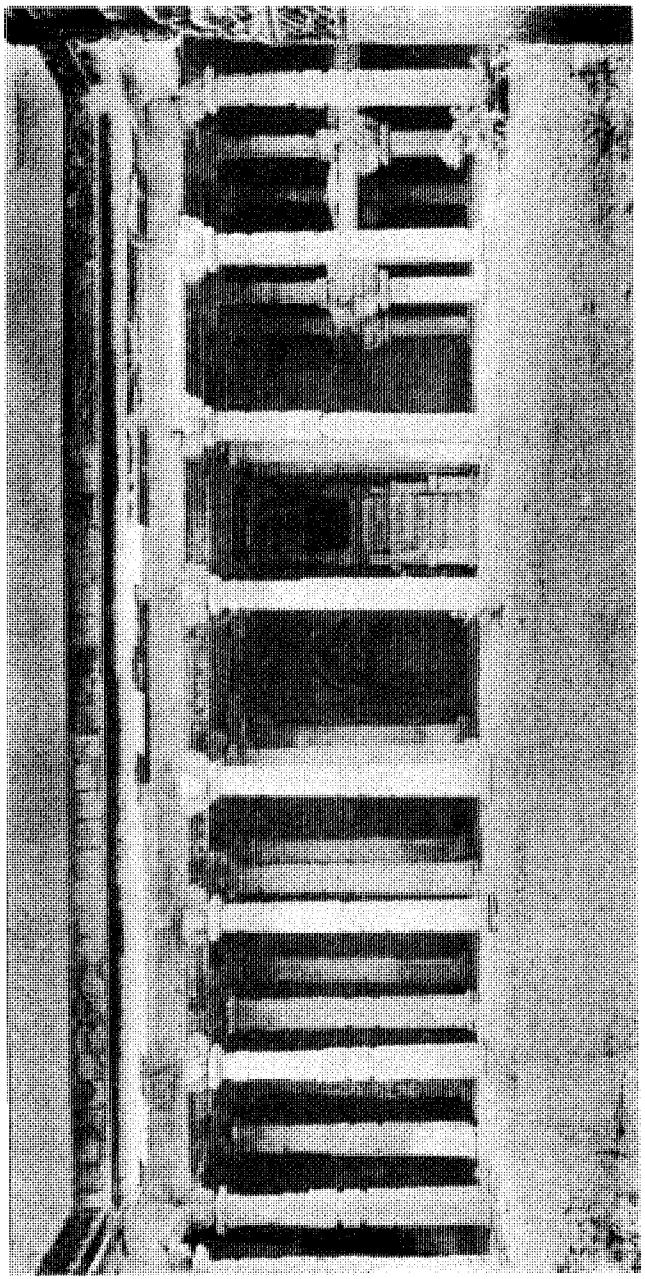


Fig. 4. Kaman, Chaurasi Khamba Masjid, view of qibla colonnade from courtyard showing women's gallery. Photo: M. Shokoohy

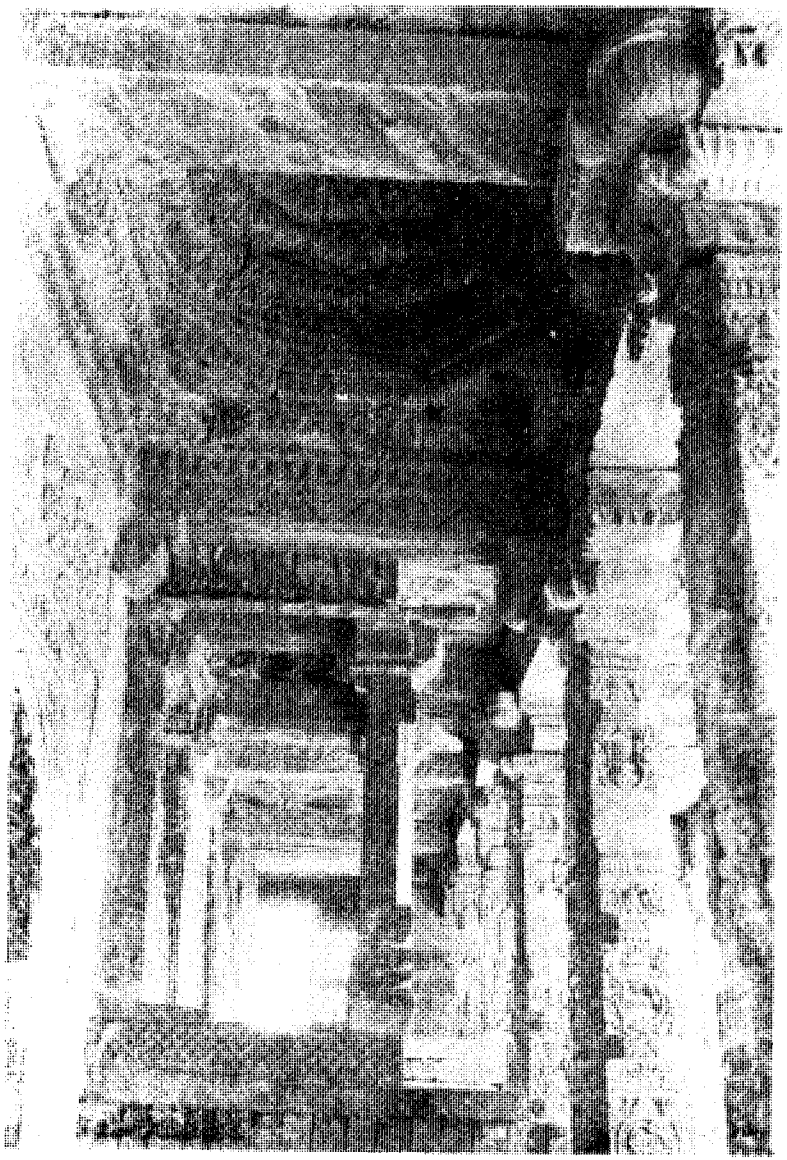


Fig. 5. Kannauj, Chaurasi Khamba Masjid, view of qibla colonnade showing the mimbar and its canopy

Photo: M. Shokoohy

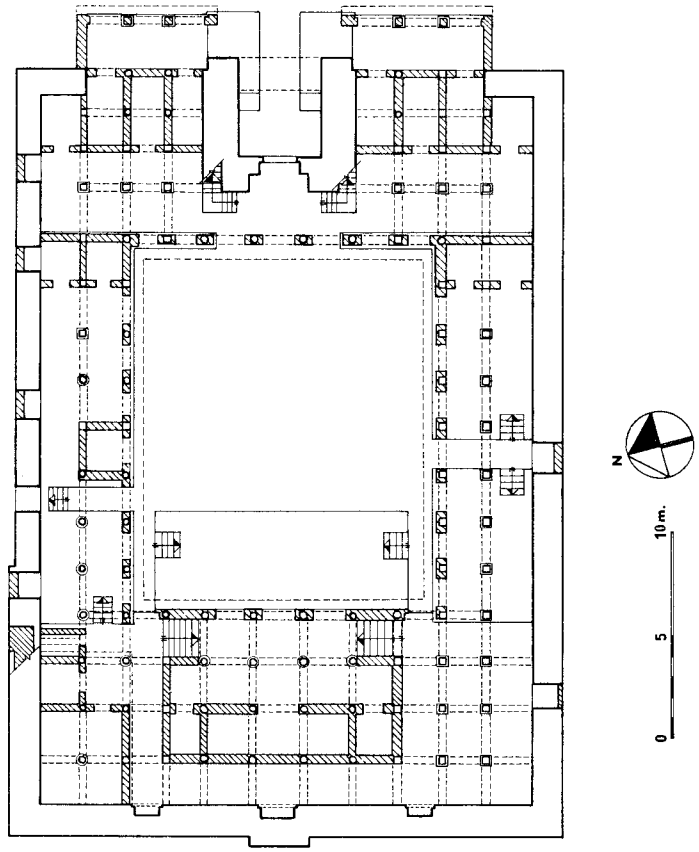


Fig. 6. Bayana, the mosque of Ukha Mandir, plan of the building showing its present condition. The shaded areas show later additions at the time of its conversion into a temple.

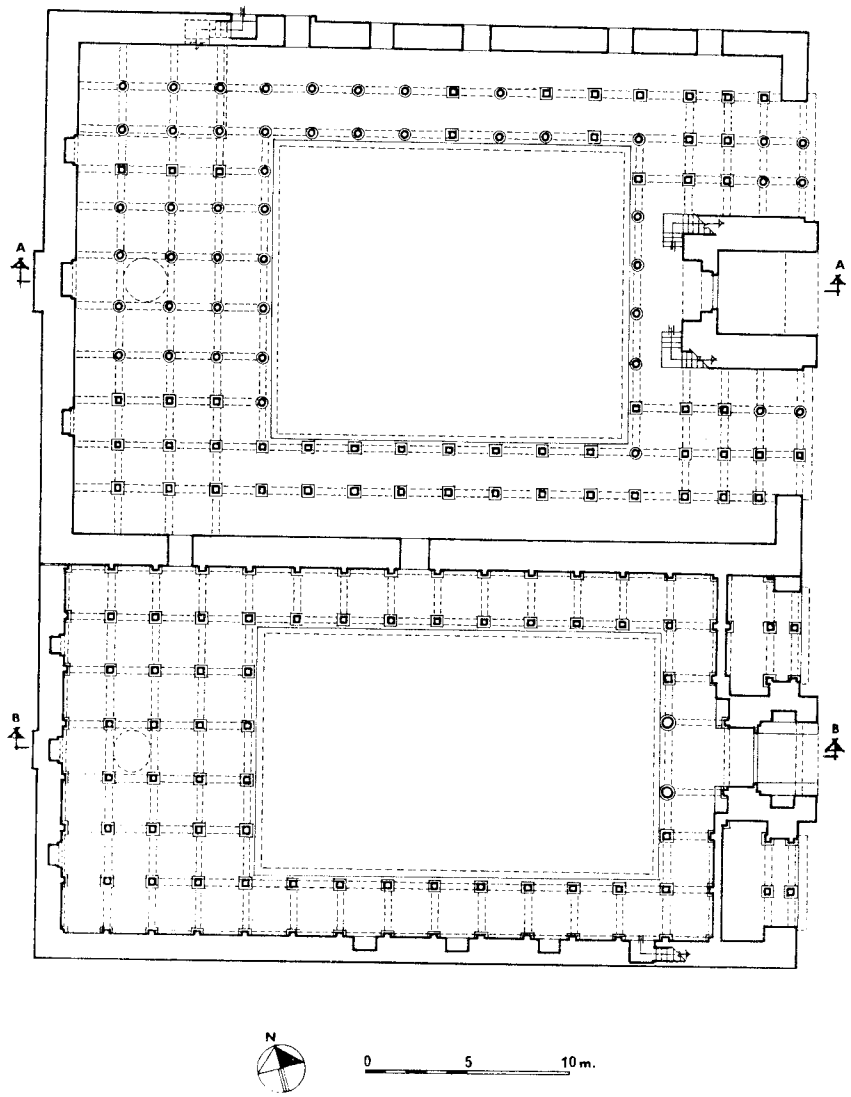


Fig. 7. Bayana, the mosque of Ukha mandir and Ukha masjid, ground plan, original condition.

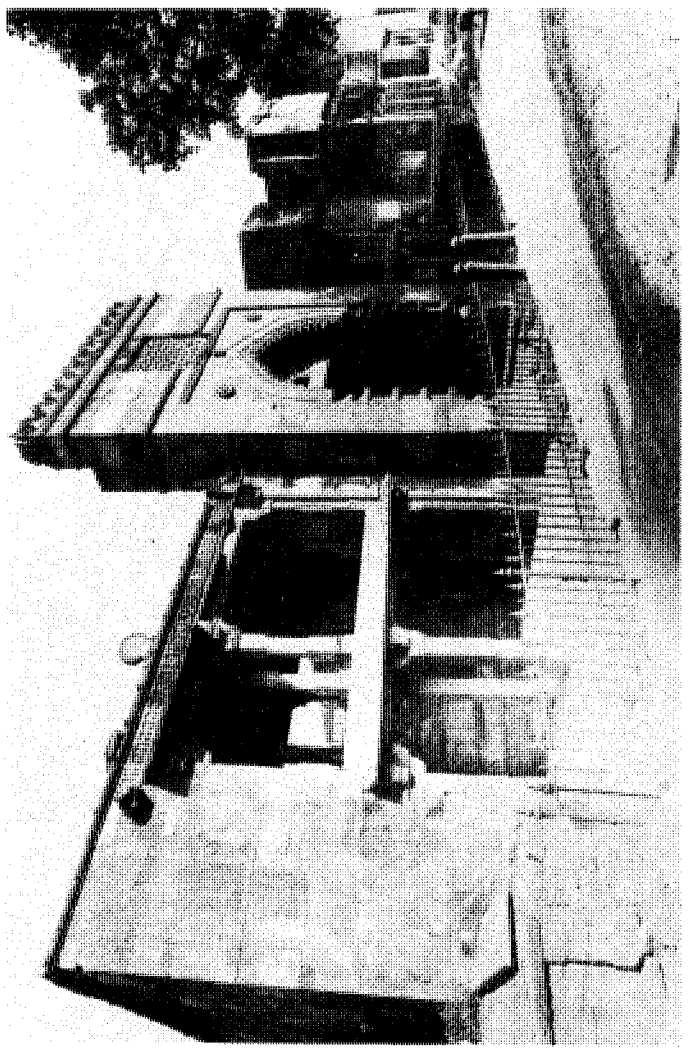


Fig. 8. Bayana, Ukha masjid and Ukha mandir, view from southeast with Ukha masjid façade in the foreground

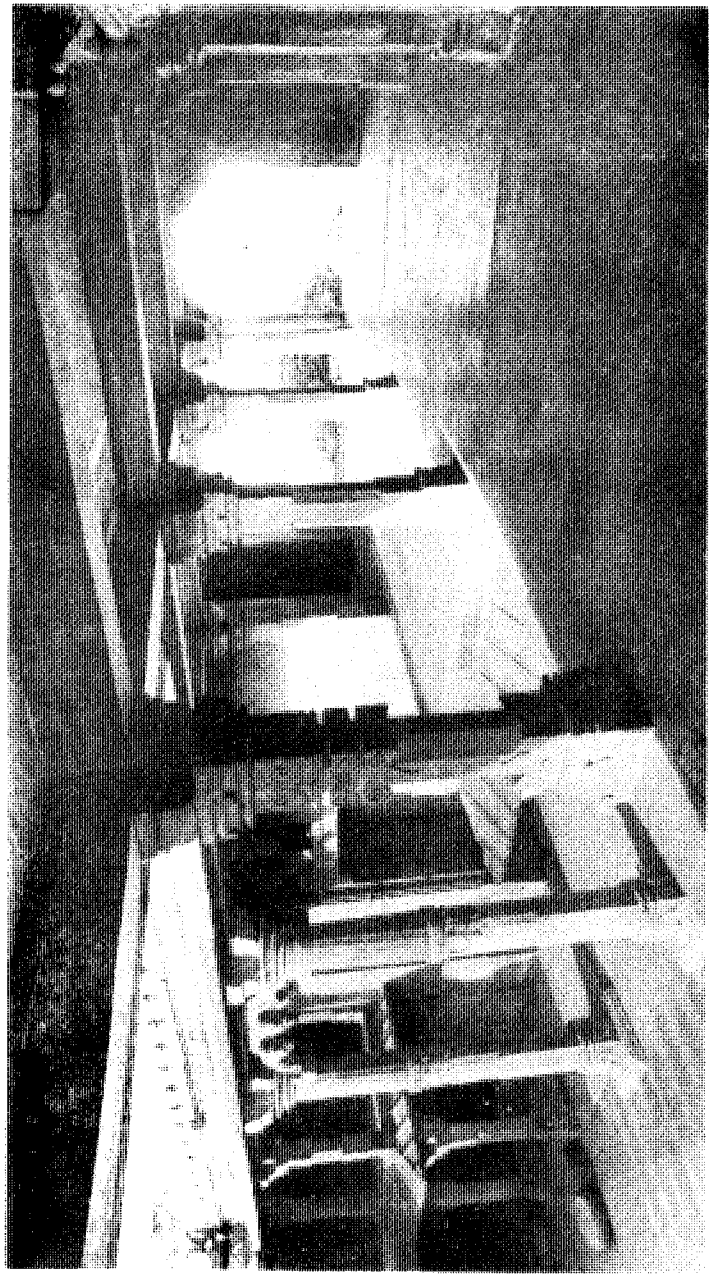


Fig. 9. Bayana, Ukha masjid, view of riwaq. Photo: M. Shokoohy

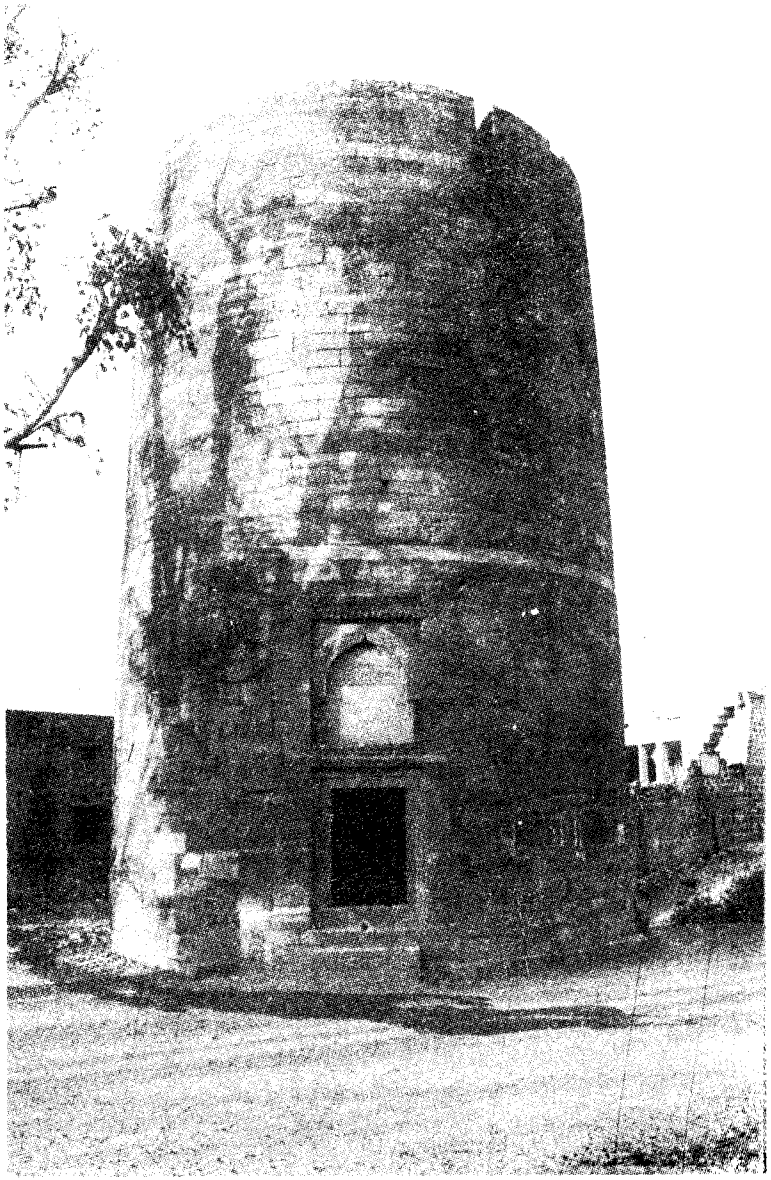


Fig. 10. Bayana, Ukha mandir, southern view.
Photo: M. Shokoohy

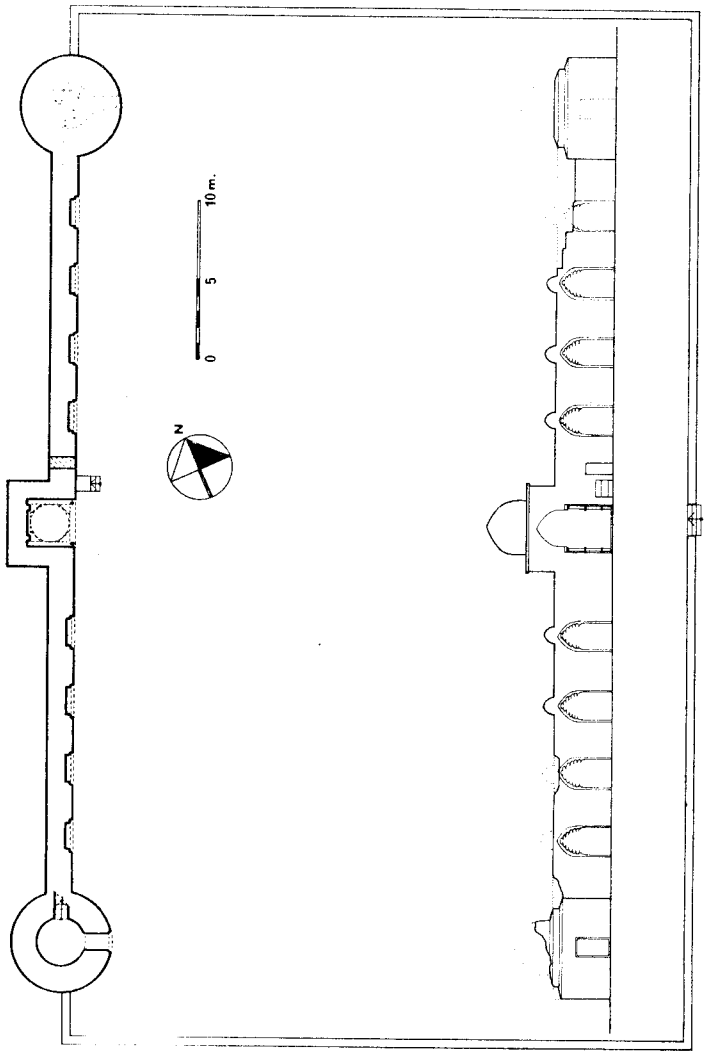


Fig. 11. Bayana, Idgāh, plan and elevation.

CHAPTER II.8

Temple Niches and *Miḥrābs* in Bengal*

PERWEEN HASAN



The niche in the *qibla* wall of a mosque before which the Imam or prayer leader stands during *ṣalāt* or ritual prayer of Muslims is the *miḥrāb* (Fig. 1). The word *miḥrāb* is derived from the Arabic *ḥarba* meaning spear, and from the south Arabic *mikrab* meaning temple, but the etymology is not certain. As early as AD 624, the spear was stuck in the ground in front of the Prophet to mark out the prayer area in open spaces, and also to indicate the direction of the *qibla* which was first Jerusalem and then the Ka'ba in Mecca. During *ṣalāt*, it is necessary for Muslims to face the *qibla*, and it is generally also the direction of a mosque's orientation. The spear became a symbol of authority when the early caliphs carried it on ceremonial occasions.

The word *miḥrāb* has a complex pre-Islamic history as is evident from literature. It indicated a special place of honour in a palace, or, sometimes, the whole palace. In the Qur'ān, it refers to that part of the palace where the king is (Sura 38, v.21); a place where images are put (Sura 34, v.13); and a temple or a cell in a temple where one prays (Sura 19, v.11).[1] It began to have a symbolical or liturgical sense in the faith from the time of its first appearance as a concave niche in the Prophet's Mosque in Madina, when it was rebuilt and enlarged during AD 707–9 by order of the Caliph al-Walid.

The niche is used universally as a setting for an honoured image, and it was used in the mosque of Madina to commemorate the spot where

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the Prophet had stood while leading the prayers as the first Imam in his house-cum-mosque. Gradually, it became transformed into an automatic feature of all mosques. The common explanation that the *miḥrāb* is necessary to indicate the direction of prayer is unsatisfactory because (a) early mosques in Islam had no *miḥrāb*s; (b) the *qibla* is the direction of the mosque's orientation, therefore, a niche for the same purpose is redundant; and (c) the niche is not visible from most parts of the mosque. The interpretation that it is a symbolic suggestion of the presence of the Prophet himself is more acceptable to scholars today. Its sanctity was further stressed when a cupola was raised in front of it.[2]

Because of the Quranic passage (Sura 24, v.35–6) where God is described in a parable, the *miḥrāb* is often decorated with a lamp motif inside it. The verses in translation are:

35. Allah is the Light
Of the heavens and the Earth
The parable of His Light
Is as if there were a Niche
And within it a Lamp:

[. . .]

Allah doth guide
Whom He will
To His Light:

[. . .]

36. (Lit is such a Light)
In houses which Allah
Hath permitted to be raised
To honour; for the celebration,
In them, of His name;
In them is He glorified
In the mornings and in the evenings.[3]

In v.35 the Arabic word used is *miškat* here translated as niche. *Miškat* is a shallow recess in the wall of a house, fairly high from the ground in which a light is usually placed. The niche with a lamp, generally accepted as a decorative motif for *miḥrāb*s, is also used to decorate prayer rugs and tombstones. In mosques, incense and candles are burned in the *miḥrāb* niche, and it is often anointed with perfumes by devotees who believe that it is a source of *baraka* or divine grace. This interpretation of the *miḥrāb* as a symbolic form is acceptable when the mosque has only one *miḥrāb* as one sees in the early mosques of western Asia, an

area of initial conquest by the Muslims. The niches themselves were variations of the same design—an arch on colonnettes. The arch on columns or the niche motif was used to decorate architecture as well as coins used by the Muslims in the seventh and eighth centuries. However, one cannot be sure that these are strictly *miḥrāb*s.[4] The Great Mosque of Damascus has four *miḥrāb*s of which one is quite modern, and of the other three, one cannot be certain that they are all contemporaneous with the mosque built in AD 705–10.

Then how does one interpret the multiple *miḥrāb*s that are found along the *qibla* or west wall of many of the mosques of the Indian subcontinent?[5] Particularly in the case of Bengal, right from the earliest times, regardless of how small the mosque is, the *qibla* wall has as many *miḥrāb*s as there are entrances on the east. The *miḥrāb*s are in axial alignment with the doorways as if the niches were generated by the entrances. This peculiarity was noticed while drawing and surveying the plans of existing mosques of Bengal built between the thirteenth and sixteenth centuries.

Later, an investigation of the published plans of mosques of northern India revealed that this feature was common although not regular from the earliest times in other regions as well, distinguishing these Indian mosques from those of other countries. The earliest known mosque in the Indian subcontinent is the Grand Mosque of Bhambore, about 40 miles south of Karachi in Pakistan, dated to the eighth century.[6] Excavations reveal that its plan is of an open courtyard with covered cloisters on all sides. It is based on the traditionally early mosque plan, popular not only in Delhi but in all the provinces of India except Bengal. The foundation of the *qibla* wall does not reveal traces of any *miḥrāb*. The absence of a *miḥrāb* is not unusual considering the early date of the mosque, as in the initial days of Islam, this feature was not considered indispensable.

The Quwwat-ul Islam Mosque in Delhi of AD 1192, the earliest extant mosque of the subcontinent, has a similar traditional courtyard plan.[7] The *qibla liwan* was originally nineteen bays wide and four aisles deep. The wall had five *miḥrāb*s and there was a shallow corbelled dome in front of each one. The *miḥrāb*s therefore, did not correspond to the number of bays. Later, when a screen of five arches was thrown across the front of the western *liwan* to give it a mosque-like façade, the arched openings of the sanctuary façade could not be exactly aligned with the *miḥrāb*s inside. The Arhāi-din-ka-Jhomprā Mosque of Ajmer, built between AD 1200 and AD 1206, has only one *miḥrāb*.[8]

The Jamatkhana Mosque of Nizamuddin, datable to the early fourteenth

century, is the first mosque of Delhi to have a *miḥrāb* corresponding to each front doorway.[9] It is a rectangular building without any enclosed courtyard, and consists of three separate chambers. The central chamber is square and completely symmetrical. Each of its four walls has a large central arched niche flanked on either side by two narrow elongated ones. On the eastern side, these arches frame entrances while on the *qibla* wall they function as *miḥrāb*s. On the north and south walls, the large central niches contribute to the overall symmetry while the flanked archways are doors that communicate with the two side wings. These side wings have large entrances in front and a *miḥrāb* in alignment with the front entrances. In keeping with the ornamentation of the rest of the mosque, the *miḥrāb*s have miniature Indian pillars to replace the west Asian colonnettes.

Multiple *miḥrāb*s become a more consistent feature in the mosques built during the Tughluq era in Delhi, as well as those built in the provinces of Gujarat, Mandu, and Jaunpur. All these mosques are designed around a centrally enclosed courtyard, with the main entrance from the front, and perhaps one each from the north and south sides. The *qibla liwan* is composed of a number of intersecting bays and aisles. The *miḥrāb*s along the *qibla* wall correspond to the entrances into the bays of the sanctuary.

Among the various provinces of Sultanate India, the earliest extant dated mosque after the Quwwat-ul Islam and the mosque of Ajmer is the mosque of Zafar Khan Ghazi in Tribeni, in Hughly district of West Bengal, dated by inscription to AD 1298.[10] It is a rectangular, entirely covered structure, where massive piers divide the interior into five bays and two aisles (Fig. 2). Each bay is entered by a large arched entrance on the east and is terminated in the *qibla* wall by a *miḥrāb*. Each of the ten square units of the interior is covered by a dome. The aisles also have entrances from the north and south sides. With the exception of the Adina Mosque, this arrangement is followed in all the mosques of Bengal that were built subsequently, right into Mughal times. The number of square bays were increased or decreased according to the size of the building desired.

Heavy rainfall was probably the reason why the interior open courtyard was dispensed with, and what was really only the western *liwan* of a standard courtyard-type mosque became transformed into an independent building. Large, entirely covered, rectangular mosques are also found in Turkey, for example the Ulu Cami of Bursa (dated AD 1399) and Eski

Cami of Edirne (dated AD 1402–13), where each square bay is covered by a dome as in Bengal. An outstanding difference is that the Anatolian mosques never have more than one *miḥrāb*, while the Bengali ones always have several.[11]

The Adina Mosque in Hazrat Pandua of Malda district, West Bengal, was built in AD 1274–5 and is the largest mosque of the Indian subcontinent. It is the only traditional, courtyard-type mosque in Bengal and like the north Indian mosques of its type mentioned earlier, each bay of its sanctuary has an arched entrance from the courtyard in the east corresponding to a *miḥrāb* in the west wall (Fig. 3).[12]

Since the Muslims have always borrowed freely from local building traditions, the appearance of this unusual phenomenon of multiple *miḥrāb*s led to an investigation into the position and significance of niches in the temples of Bengal and neighbouring Burma. In Bengal, almost all the temples of the pre-Muslim period have disappeared. From the few ruins that still remain in west and southern Bengal, it seems that the *rekha* or *shikhara* type of temple of Orissa was quite popular in these areas. Manuscript illustrations such as those in the Cambridge University MS of the *Ashtasahasrika Prajñāpāramitā* copied in Nepal in AD 1015[13] prove that the tiered pyramidal type known as *bhadra* or *pirhā* was also popular, although there are no extant examples. The *pirhā* was sometimes surmounted by a *shikhara* or *stūpa*.

It is well known that in the early medieval period, eastern India was the most active centre of Buddhism, and Buddhist thought travelled from here to centres outside India. Consequently, extant examples of monuments that have disappeared from Bengal may still be found in Burma in several eleventh- and twelfth-century temples of Pagan, because climate and history have been kinder to ancient monuments there. The closeness of the architectural tradition of these areas is obvious when we consider the terraced shrines of Bengal and their Burmese counterparts. Although the Paharpur, Mahasthan, and Mainamati type of temple is not found farther west of Bengal, similar types of temples are still extant in Pagan.[14]

The Somapura Mahavihara, identified with the ruins of Paharpur, was an important centre of Buddhism in eastern India. It was built under the patronage of Dharmapala at the end of the eighth or beginning of the ninth century, and is the biggest monastery so far excavated in India. The main sanctuary was three storeys high, and from its centre rose a tall square shaft. On the second terrace there seem to have been small

chambers projecting from the central shaft with *mandapas* in front. There were probably shrines for housing images, for the remains of platforms which accommodated the images can still be seen on the wall behind. The ruins of temples excavated in the other Buddhist sites of Bengal, for example, Mainamati and Vikramshila, suggest similar plans, although their superstructures remain a matter of conjecture.

In Pagan, Burma, the Ananda is the most famous and revered of all temples, and is still in active worship. Built towards the end of the eleventh century, its plan, like most of the temples of Pagan, is a square with projecting porticoes facing the four principal directions. In its centre is a solid square pile as opposed to the hollow shaft of Somapura. This pile enshrines in a niche on each side, a colossal standing image of the Buddha. It also serves an important structural function as it acts as the support for the curvilinear tower (*shikhara*) of the temple. Several temples of Pagan are based on this basic plan. It seems that the likely model for both the Bengali and Burmese architects who designed shrines with images on the four faces of a central square structure was the Jaina *caturmukha* type of shrine.

Early prototypes of the temples of Pagan can be found in the village of Hmawza, the site of Srikshetra, capital of the Pyus, near the old city of Prome. The Lemyethna Temple at Hmawza is a simple square building of brick with an entrance from each side (Figs 4 and 5). At the centre of the chamber is a square, solid masonry obelisk. A sculptured Buddha sits on an axial line with the entrance doorway on each side. Between the obelisk and the walls is a barrel-vaulted space. The roof is composed of three sloping tiers placed one above the other in diminishing scale (*bhadra* type). The topmost one, corresponding to the top of the obelisk, is flat; the final *shikhara* is missing.

Another example at Hmawza is the Bebe Paya Temple (Figs 6 and 7). Also of brick, it consists of a groin-vault cell with an altar at the far end. The sanctuary has a single entrance, and the three blind sides have false doorways. Outside, three stepped tiers on a diminishing scale are surmounted by a *shikhara*.

More elaborate versions of these temples of Hmawza were built in Pagan in the eleventh century, some of which are still in use today. It is very likely that similar temples existed in Bengal. The resemblance in plan between the eleventh-century Ananda Temple of Pagan and the earlier Somapura Temple of Bengal has already been noticed. Excavations at Hmawza have also produced terracotta votive tablets with representations of temples which are similar to those represented in relief

in the stone sculptures of Bengal, and illustrated in manuscript paintings of Bengali sites.

Once it is established that brick temples similar to those at Hmawza existed in Bengal in pre-Islamic times, the similarities between these and the brick mosques of the pre-Mughal period (fourteenth–sixteenth centuries) become very significant. First, there is the common building material, brick. Second, all the mosques and most of the temples happen to be built on an east–west axis. This similarity in orientation is accidental, and is not a result of emulation of one type by the other. The most important similarity is to be noticed in certain details of plan. In the Hmawza temples of Burma, the images of the deities are on axis with the entrances. Where there is only a single entrance, as is common, the altar is on the opposite side of the room; when there are entrances from all four sides, four corresponding images are found on the faces of the central square obelisk. This convention of a doorway corresponding to a niche or a platform holding a sacred image probably existed in Bengali temples as well.

As the congregational nature of the mosque often demands a building that is larger in size than an average temple, it becomes necessary to have more than one doorway. An arched opening leading into each bay of the sanctuary was already an established convention in the rest of the Muslim world. The practice of a niche corresponding to a doorway seemed appropriate to the designers and craftsmen working within the Indian tradition. Moreover, to the newly converted Muslim community, niches were directly associated with the worship of deities in temples, and a single *miḥrāb* in the west wall would have appeared to resemble too closely the sacred position of the image in a temple. Multiple *miḥrābs* would dilute that resemblance by diffusing the importance of a single niche. In temples, the most important place is the image niche; everything else centres upon it. To the orthodox Muslim, it is the whole *qibla* wall that needs emphasis, and not just the single niche in it. Nevertheless, in many cases, the central *miḥrāb* was still treated in size and decoration as the most important, and received the veneration that is paid to single *miḥrābs* in mosques outside India, anointing of the niche and lighting of votive candles in it being common practices.

Multiple *miḥrābs* also served to give a horizontal emphasis to the interior spaces of centrally planned buildings such as the numerous square, single-domed mosques of Bengal. This was important, because a ritual requirement of congregational prayer in Islam is the formation of straight lines. Only when one row is completed can the next one be

formed. A row of *miḥrāb*s aligned to a row of entrances, together with the real and blind doorway on the sides at the end of the aisles, served to give this horizontal emphasis to a square space. Thus, when the temple niche was transformed and multiplied to serve as *miḥrāb*s in the mosque of India, not only was it imbued with a new symbolism, but it had a new architectonic function to perform.

The hanging bell on a chain was a popular ornament in temple architecture. The Muslims replaced the bell with a lantern and placed it within an arch or niche. In Bengal, starting with the Adina Mosque, the motif of a rectangular panel enclosing a niche, with a chain and ornament descending from the apex of the arch, was used ubiquitously on the wall surfaces of all Muslim monuments, including tombs and gateways. Because of the hanging device inside the arch, there can be no doubt that these are imitations of actual *miḥrāb*s. Like the dome, this ornamental design became a stamp of Muslim architecture. In some mosques of the pre-Mughal period, it was given a specially significant place in the mosque exterior (Fig. 8). In the interior, we have mentioned how the central *miḥrāb* received special attention out of a whole row of *miḥrāb*s in the *qibla* wall. The projection of the central *miḥrāb* in the exterior wall was also specially emphasised with sunken panels framing *miḥrāb* motifs, or a large recessed arch with a hanging ornament. The decoration of the *miḥrāb* projection seems to be a practice confined largely to Bengal, with rare exceptions in Delhi, and the noteworthy exception of a tomb in Sind. In the fifteenth-century tomb of Jam Nizamuddin in Thatta, Pakistan, the richly carved projection has an array of miniature *shikhara*s as decorative motif.[15] This kind of externalisation of the central *miḥrāb*, or special ornamental treatment of the *miḥrāb*, does not appear anywhere else in the Muslim world.

Just as the offsets of the projections of Bengal mosques were derived from temple architecture, the sunken panels with niche designs also originated in the central *ratha* of *shikhara* temples. The temples generally had a recessed niche for exterior images on all three sides except the front, which had the doorway. Even though the exterior *miḥrāb* motif did not have the same symbolic significance as the exterior image niche of the temple (described by Stella Kramrisch as expressing 'the coming forth of the image from and through the massive wall')[16] it serves to emphasise the importance of the central *miḥrāb*.

As an innovation brought into the design of the mosque during the early Muslim period, the varied use of the *miḥrāb*, both as an architectural feature and as a decorative motif, seems to speak of a spirit of accommodation in the patrons of architecture, who generally belonged to the ruling élite. The establishment of this convention in religious architecture is another piece of evidence of the cultural syncretism that was taking place throughout the period of Muslim rule in India.

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5. Serjeant, 'Miḥrāb', p. 489.
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16. Stella, Kramrisch, *The Hindu Temple 2* (Calcutta, 1946; rpt. Delhi, 1976), p. 301.



Fig. 1. Masjidbarua, mosque, AH 870/AD 1465, interior *miḥrāb* wall. Photo: P. Hasan

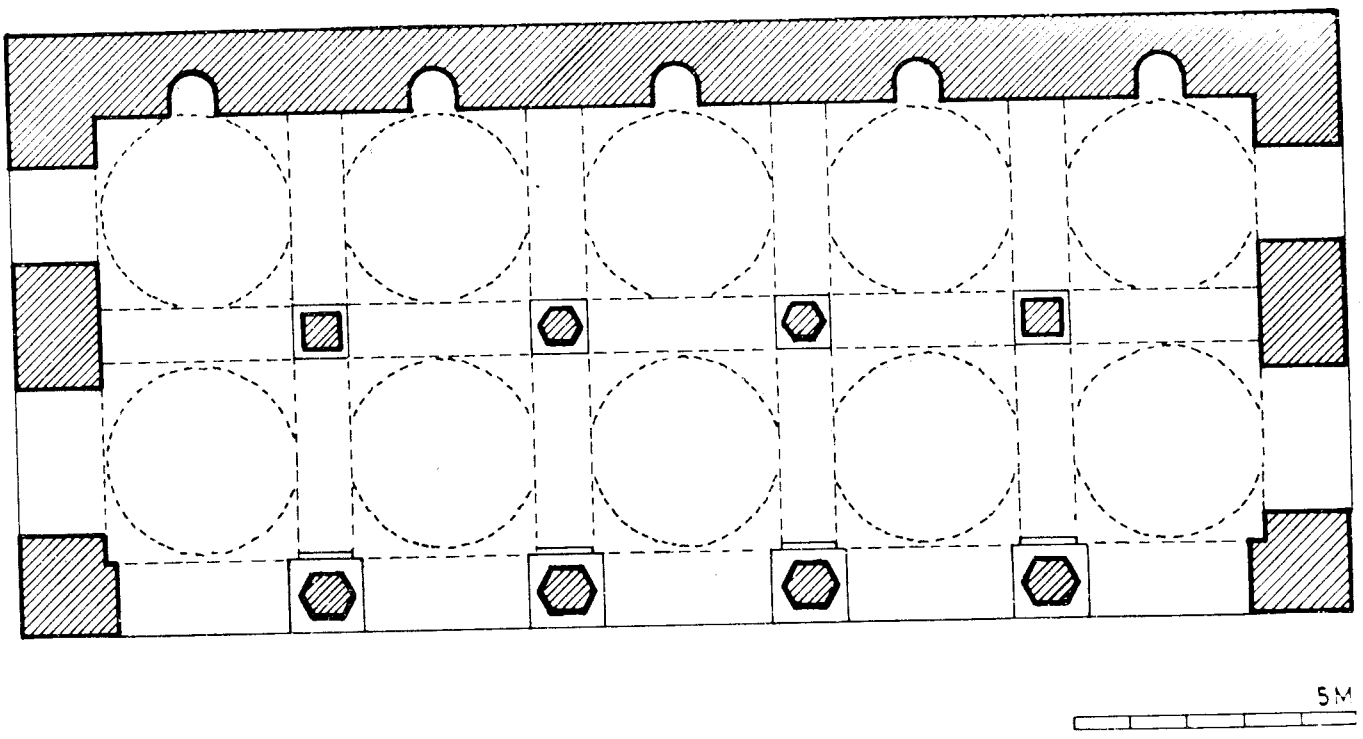


Fig. 2. Tribeni, mosque of Zafar Khan Ghazi, AD 1298, ground plan.

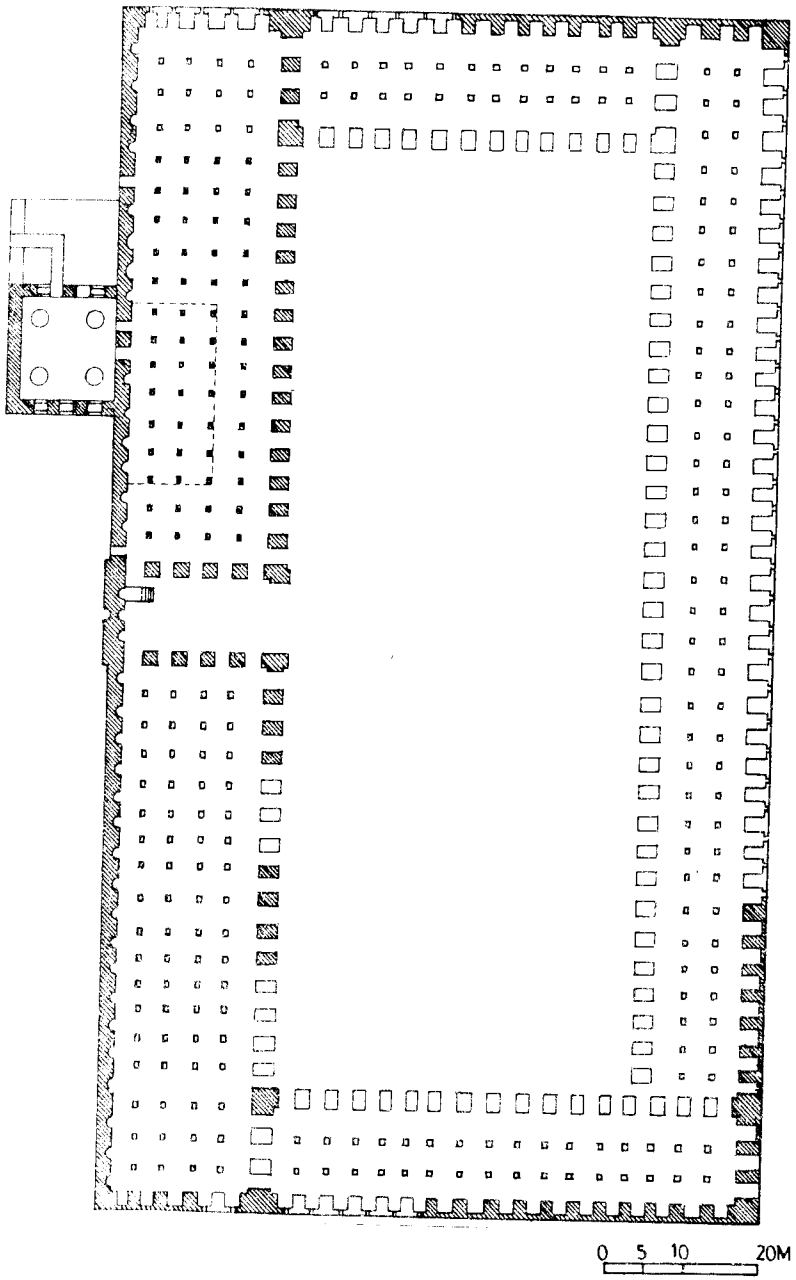


Fig. 3. Pandua, Adina mosque, AD 1375, ground plan.

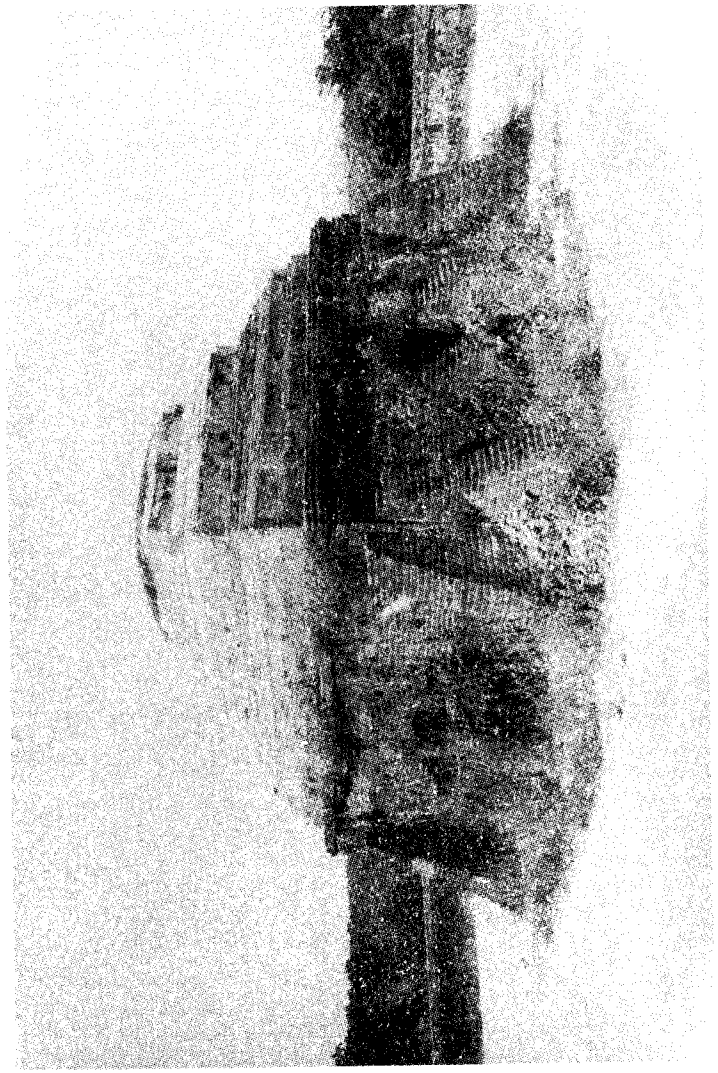


Fig. 4. Hmawza, Lemyethna temple, 11th century, general view. Photo: P. Husain

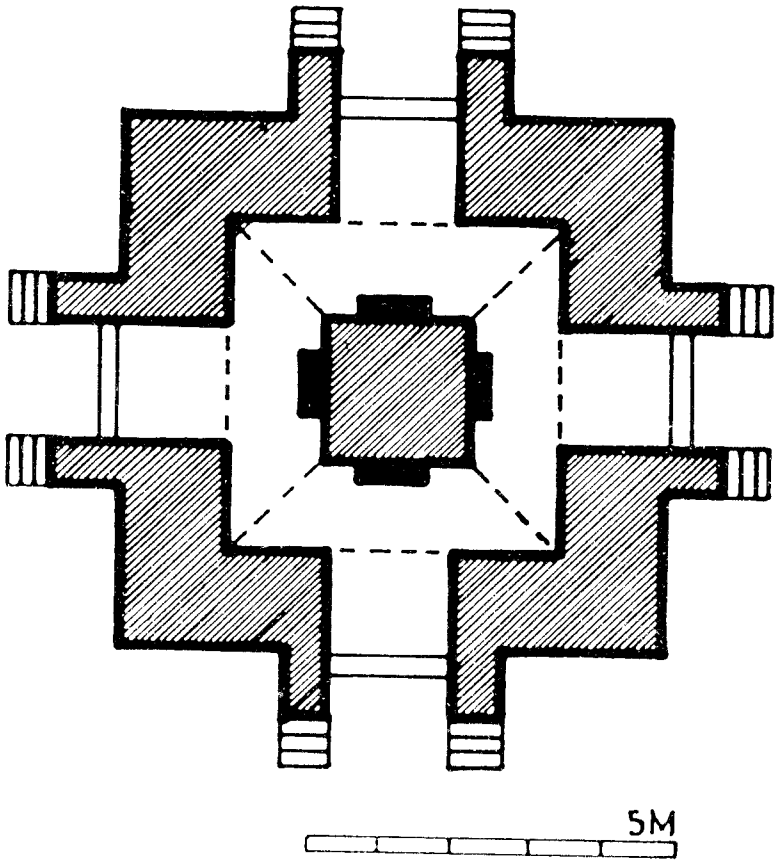


Fig. 5. Hmawza, Lemyethna temple, plan.



Fig. 6. Hmawza, Bebe Paya temple, 11th century, general view.
Photo: P. Hasan

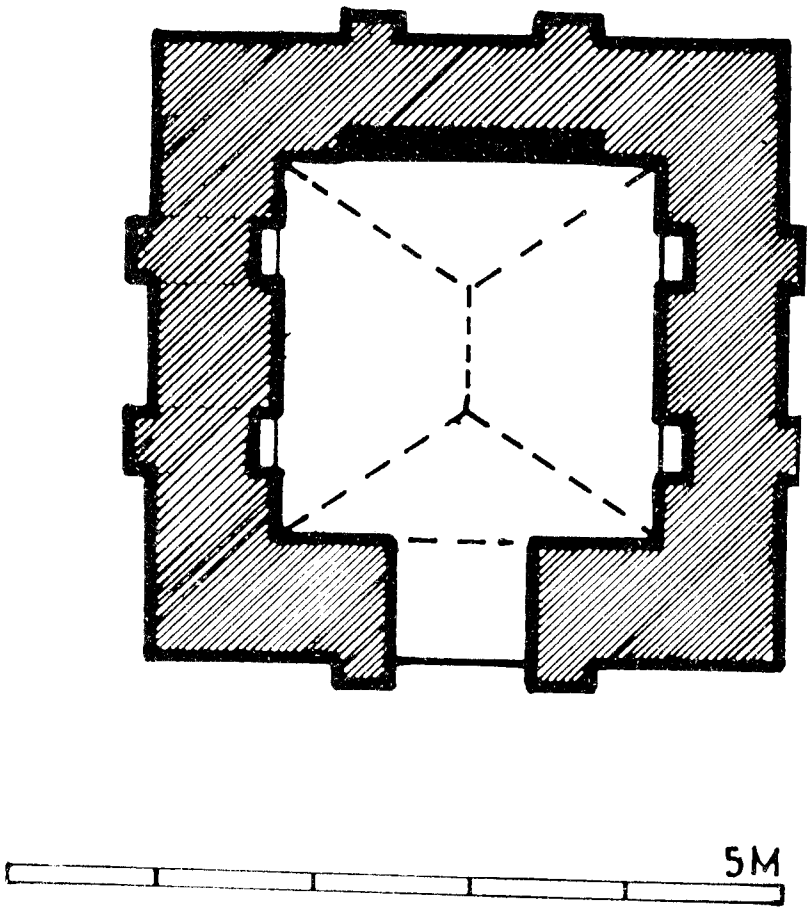


Fig. 7. Hmawza, Bebe Paya temple, plan.

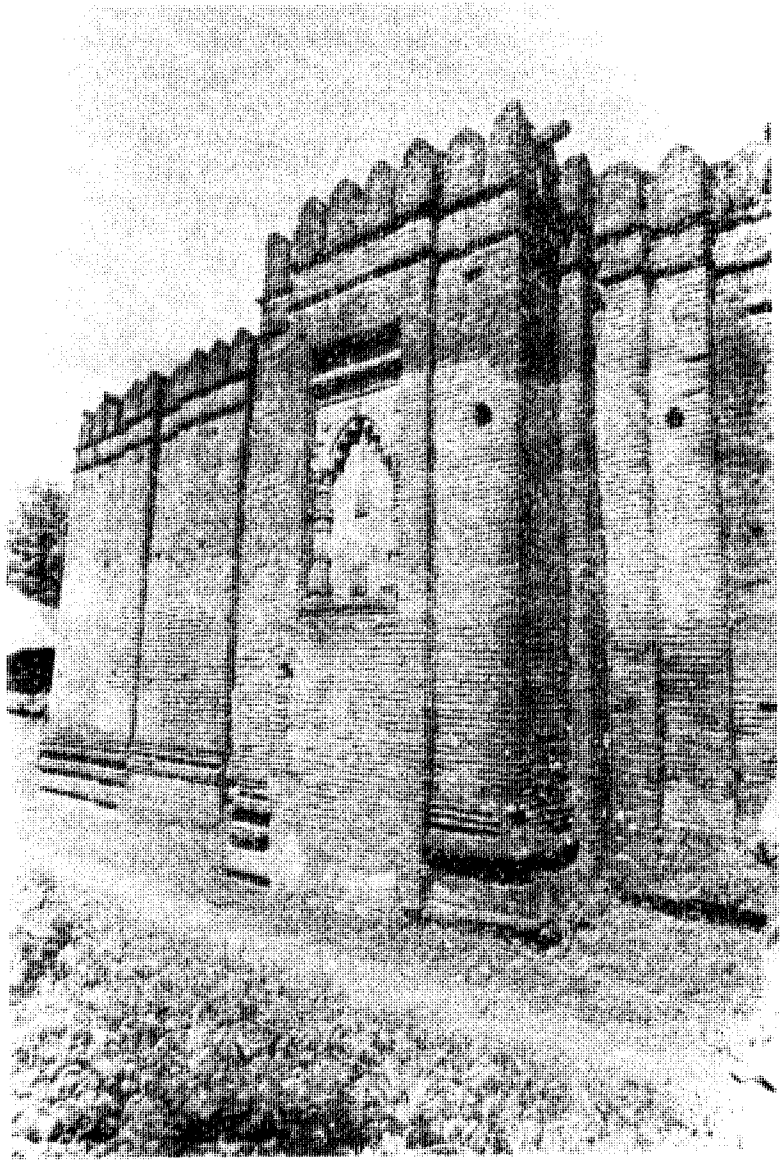


Fig. 8. Muazampur, mosque, AH 836–9/AD 1433–6, exterior *miḥrāb* projection.

Photo: P. Hasan

CHAPTER II.9

Ancient Asian Building Techniques in Hindu and Muslim Structures of the Vijayanagara Empire and in Subsequent Indo-Islamic Monuments*

KLAUS FISCHER



Vijayanagara architecture owes its solidity and beauty to two essentially different techniques: trabeated stone masonry without mortar based on the post-and-lintel system,[1] and corbelled domical roofs in dry masonry (as in medieval temples) or flat ceilings built of stone and mortar or brick and mortar.[2] The Indian temple, from the small sanctuaries of the Gupta age up to the huge northern *śikharas* and southern *maṇḍapas*, was constructed in dry masonry.[3] According to literary references, the builders of the huge Vijayanagara *maṇḍapas* with their massive stone slab ceilings, never seriously considered the suggestion of foreigners to mix mortar in order to enable a new kind of superstructure for secular buildings.[4] Their ancestors had, however, mastered this very technique for the barrel-vaults of apsidal brick temples from the Gupta age onwards,[5] in stone *śikharas* of Hindu temples in the Salt Range and for exceptional domed structures within the slender *śikhara* towers.[6] With the perfection of the cupola[7] another technical innovation reached India from the Islamic Near East.

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On the fringes of the Vijayanagara empire we see the ruins of Firozabad on the [river] Bhima[8] which marked the northern frontier of this kingdom. Here, we find flat ceilings or domes over squinches in stone and mortar structures. Whilst in Vijayanagara proper, Hindu stone masons continued to create platforms and *maṇḍapas* from cut stone, other artisans worked with mortar and brick or stone. The latter succeeded in modelling varieties of superstructures that had not yet been seen in southern India before (Fig. 1). They built a square chamber in dry masonry covered by a 'lantern-roof' (Fig. 2) and erected a soaring pyramid of brick in mortar on it; they built flat ceilings akin to the mode of reinforced concrete out of small stones and mortar.[9] In the halls of the so-called 'Elephant Stables' (Figs 3–6) with the persistence of domical roofs in corbelling arrangement as in medieval temples (Fig. 3), the 'Lotus Mahal' (Fig. 8), and the 'Queens' Bath' they conceived flat or vaulted superstructures. Here, they developed a combined squinch–pendentive system varying and elaborating on Indo-Islamic forms rather than restricting themselves to simple mechanical constructions. After the fall of Vijayanagara these ingenious devices led to new experiments in the Hindu castle at Chandragiri,[10] in some dwelling houses, mosques, and tombs of the Islamic cities of Bijapur (Fig. 4), of the Deccani Qutb Shahi dynasty (Figs 5–6), and again, in a Hindu setting of the Nayak period, in the palaces of Thanjavur and Madurai.[11] A special way for covering spacious *maṇḍapas* with stone slabs laid on inverted T-beams (Fig. 7) and protecting this structure against monsoon rains by means of layers of concrete (Fig. 8) was developed in subsequent periods.[12] Let us now see selected examples of these two structural methods.

Firozabad on the Bhima: Ruin of a Monumental Gateway in the City Wall

Under Taj ud-din Firuz Shah Bahmani (AD 1397–1422) a residence was constructed obviously with the cooperation of Islamic master-builders and local Indian masons. In preceding centuries the latter had proven their skill in erecting Hindu and Jaina temple walls by large slabs in dry masonry.[13] For the construction of arched entries, barrel vaults and transitional zones for dome rooms, they laid well-dressed stones in mortar, adapted, the various pendentives and squinches used in the Near Eastern Islamic world[14] and also relied on walls constructed with rubble-and-lime work. Indigenous Indian patterns were maintained: corbelling layers of stone in order to convert the square into the circle

as basis for a cupola, and stones in a hardening concrete-like plaster in the form of ribs, the shape of which may go back to *caitya* halls in the Deccan. The aforementioned builders are likely to have continued their workmanship at Vijayanagara, when this residence necessitated schools of well-trained craftsmen.[15]

Vijayanagara: Zenana Enclosure: 'Guards' Quarters' (Fig. 1)[16]

Bays made of stone laid in mortar forming a kind of concrete covering, nearly flat with only a slight elevation, with coffered ceilings. The solidity of the structure depends upon the quick hardening of the binding material.

Hospet: A Dilapidated Hindu Temple on the road to Hampi

Garbhagṛha in large, finely hewn granite stone. Entrance door in post-and-lintel system (see *n.* 1). Cover in the shape of a 'lantern roof',[17] formed by a series of beams laid at an angle so that the square opening tapers (Fig. 2).[18] Superstructure formed by a towering solid block of brick-and-mortar work.

Vijayanagara: 'Elephant Stables' (Figs 3–6)

In the apex of the cupola crowning the rooms (Fig. 6) we observe a pendant of age-old Indian tradition: in medieval Buddhist, Jaina and Hindu *maṇḍapas*[19] domed ceilings were composed of concentric and corbelled rings of stones laid upon a horizontal bed (Fig. 3).[20] Sometimes, the masons decorated this concentric, corbelled *karoṭaka* with a non-functional key-stone known in the temples of Gujarat and Rajasthan as *padmaśila*.[21] In the Indo-Islamic domes of sacred or secular rooms the interior crowning could be left undecorated[22] or could receive an embellishment by a pendant[23] as the cupolas (Fig. 6).

Vijayanagara: Lotus Mahal

The central tower resembles a south Indian *vimāna*. Here, however, contrasting with the massive stepped structure typical of religious Hindu architecture, we observe a totally different feeling for space.[24] The interior of the tower is spacious, airy and its compartments receive light

from cusped arches in Islamic style (Fig. 8). These form corridors in a lower storey with bays covered by flat ceilings in a nine-compartment pattern. In ancient Indian temples this type of ceiling was decorated with the signs of the Zodiac and of Hindu mythology and had the symbolical meaning of heaven.[25] The ceiling in this Vijayanagara building is devoid of decoration and constitutes, as it were, the plain functional technical form.[26] In the so-called 'Queens' Bath' at Vijayanagara, corridors are vaulted by pointed arches with the exactitude of Near Eastern Islamic technique. The roofs are flat: not in the ancient Indian trabeate style but resting with huge stone slabs on a plaster construction of domed compartments and in some cases transitional zones. These interiors give the illusion of cupola structures which in reality are moulded in plaster. Various technical devices of Vijayanagara origin were perfected in post-Vijayanagara period buildings: a net from ribs of stone laid in concrete mortar as at Firozabad supporting a nine-compartment ceiling like in the Lotus Mahal (see *n.* 26) at Bijapur, Ibrahim Rauza[27] (Fig. 4); a system of stones with a cover of plaster at Kurnool[28] (Fig. 5), and a flat ceiling on an arched basis like at Vijayanagara (see *n.* 2 and 9) at Golconda (Fig. 6).[29]

One may also mention that the technical skill leading to the huge vaultings and roofs of the Nayak palaces of Madurai and Thanjavur (see *n.* 11) served in the rebuilding of the Mysore Palace from 1897 to 1912 where the ground floor of the *kalyāṇa maṇḍapa* is constructed from a series of cusped arches, and where the three-storeyed building is dominated by a five-storeyed tower covered with a gilded dome.[30]

Even during this late period in Tamil culture, it is true, as stated in the chapter on 'Muslim influence' in the *Marg* Vijayanagara special issue,[31] that an exchange of ideas between south spiritual centres and the adjacent province always existed. Throughout the Vijayanagara empire one used arcuate, domical forms which find counterparts in the art of the neighbouring Muslim kingdom, and indicate a mobility of artistic influence and possibly also of personnel.

Finally, we have to describe a special technical achievement from which Hindu temple builders of Vijayanagara evolved a unique system of dry masonry for the ceiling of the *kalyāṇa maṇḍapas*. In the Raghunatha Temple, for example, the aesthetic ideal of a spacious hall is reached by the construction of an uninterrupted large ceiling: by inverted T-beams placed upon series of pillars (Fig. 7) we see long girders and stone roofing slabs resting on flanges thereby covering a larger room than ever attained in the traditional 'simple' post-and-lintel system (see *n.* 1). On the roof, inverted T-beams span the superstructure (Fig. 8) and

mortar without aesthetic function protects the building against weathering. The exterior view of a *maṇḍapa* in the Achyuta Raya Temple gives the impression of a well-supported structure as well as a rich ornamentation of the supporting pillars with symbolical figures of iconological importance.

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3. Percy Brown, *Indian Architecture*, vol. 1, *Buddhist and Hindu*, 3rd edn (Bombay, 1956), plates XLI 1, 2, XLII and Appendix: Glossary of Terms, pp. 247–55, s.v. arcuated beam, lintel, trabeate; Fischer, *Dächer, Decken und Gewölbe*, p. 25.
4. A. Longhurst, *Hampi Ruins* (Madras, 1917), pp. 16–17. The chronicle of Fernão Nunes, a Portuguese traveller, who visited Vijayanagara during the reign of Kṛṣṇadeva Rāya, records that the king requested the Governor of Goa to depute some Portuguese stone masons to come to Vijayanagara to superintend the building of a large water reservoir that he desired to construct near Hospet, and that the Governor sent him João della Ponte, a great worker in stone. Nunes relates that when this engineer requested the king to have a large quantity of lime prepared for the work, 'the king . . . laughed much, for in his country when they build a house they do not understand how to use lime . . .' If this statement of Nunes is correct, the Hindus of southern India are indebted to the Portuguese for the introduction of the use of a very valuable building material. It is certainly a fact that very few traces of lime mortar are discernible between the joints of the stonework of the earlier buildings at Vijayanagara except in those buildings which have been repaired at a later date. But the Hindus certainly understood the use of mortar in the treatment of brickwork long before they came in contact with the Portuguese. However, they do not seem to have made much use of their knowledge of this valuable material when erecting buildings in stone prior to the sixteenth century. It may be that, as a rule, the blocks of stone used in constructing the temples, basement of palaces and many other buildings at Vijayanagara were so large and heavy, and so beautifully dressed and accurately fitted together, that no cementing material was considered necessary.
5. Brown, *Indian Architecture*, plates XL 2, 3 and 5, 6; K. Fischer, *Schöpfungen indischer Kunst*, 2nd edn (Köln, 1961), plate 234.
6. M. Wheeler, *Five Thousand Years of Pakistan* (London, 1950) plate VIIIA; Fischer, *Dächer, Decken und Gewölbe*, pp. 128–31.

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9. Fischer, *Dächer, Decken und Gewölbe*, plates 279, 280, 283, 312.
10. Longhurst, *Hampi Ruins*, Fig. 6; O. Reuther, *Indische Paläste und Wohnhäuser* (Berlin, 1925), plate 156; Fischer, *Dächer, Decken und Gewölbe*, plate 102.
11. Reuther, *Indische Paläste*, plates 161–3; Fischer, *Dächer, Decken und Gewölbe*, plates 286, 294–6.
12. Fischer, *Dächer, Decken und Gewölbe*, pp. 32–5.
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14. Percy Brown, *Indian Architecture*, vol. 2, *Islamic Period*, 4th edn (Bombay, 1964), plate X.
15. Fischer, 'Firozabad', p. 255 and *n.* 1 and 2: Traditional Deccani rock-cut architecture imitated by Islamic buildings of the Deccan and compared with Vijayanagara Indo-Islamic art.
16. Fischer, *Dächer, Decken und Gewölbe*, plates 114, 279.
17. K. Fischer, 'Cosmological Iconology in the "Lantern Roof" of Later Indian Architecture', *Art and Archaeology Research Papers*, vol. 4, 1973, pp. 52–8.
18. Fischer, *Dächer, Decken und Gewölbe*, plates 110 and 150, after the ruined *maṇḍapa* of a Deccani temple, Patancheru, twelfth century, now in the Museum of Hyderabad, Andhra Pradesh, India.
19. H. Cousens, *The Medieval Temples of the Dekkhan* (Calcutta, 1931), p. 10.
20. H. Cousens, *Somanatha and Other Medieval Temples in Kāthiawād* (Calcutta, 1931), p. 9. To our Fig. 7 see Fischer, *Dächer, Decken und Gewölbe*, chapter 9, 'Ringsch ichtendecke', pp. 45–54, with plate 22, Khajuraho, Kandariya Mahadeva Temple, especially pendant from ceiling over *garbhagrha*, and with plates III and 246B/248 from Ranakpur, AD 1439.
21. J.M. Nanavati and M.A. Dhaky, *The Ceilings of the Temples of Gujarat* (Baroda, 1973), pp. 28–32.
22. Fischer, *Dächer, Decken und Gewölbe*, plates 63–4, 68–9, 90, 98.
23. Ibid., plates 29, 44, 77, 88.
24. *Marg*, no. 33, 1981, fig. 340.
25. Fischer, *Dächer, Decken und Gewölbe*, plates 141–5.
26. Ibid., plate 283.
27. Ibid., plates 84, 117, 298.
28. Ibid., plates 324, 326.
29. Ibid., plates 116, 312.
30. *Dasara*, Cultural festivities Souvenir (Government of Karnataka, 1981), 'The Mysore Palace: Its History and Architecture', p. 25.
31. *Marg*, no. 33, 1981, p. 105.

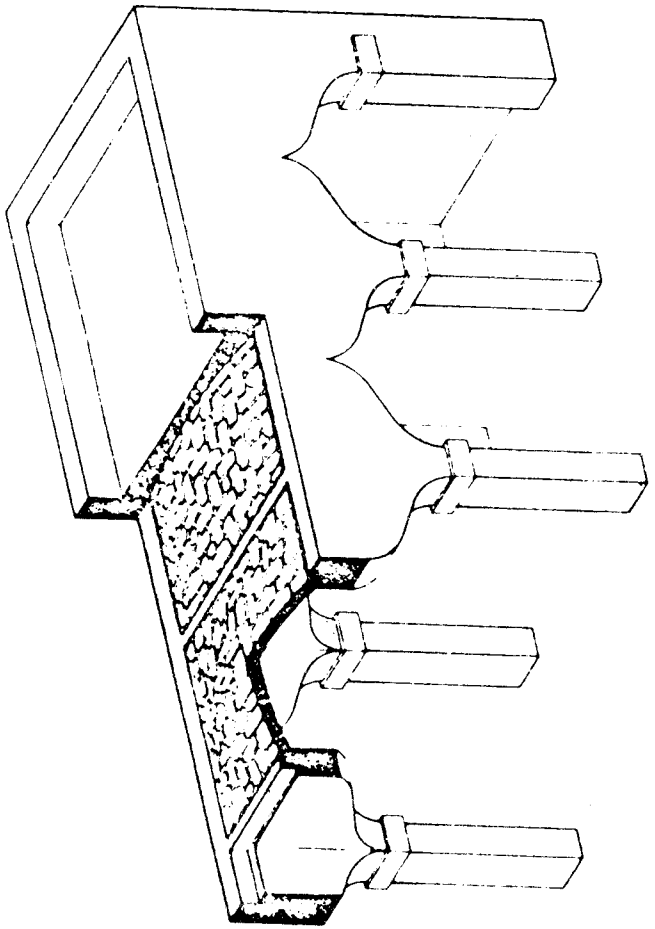


Fig. 1. Vijayanagara, zenana enclosure, mortar and brick roof construction.

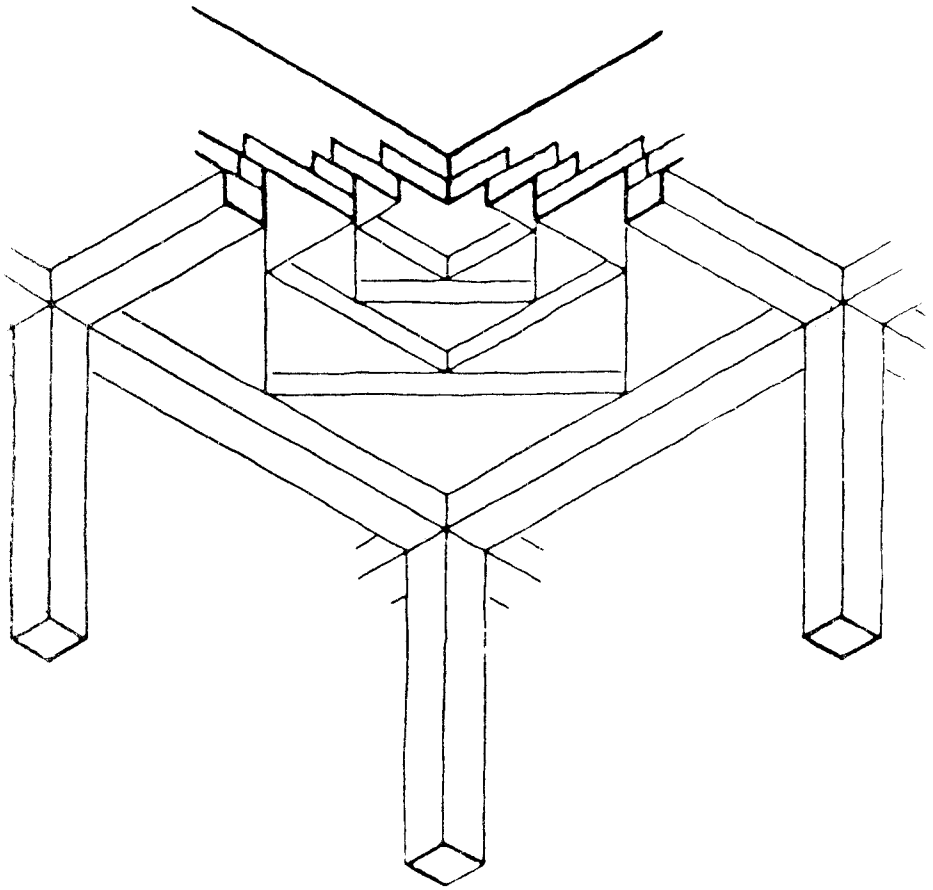


Fig. 2. Hospet, a dilapidated temple, square chamber covered by lantern roof.

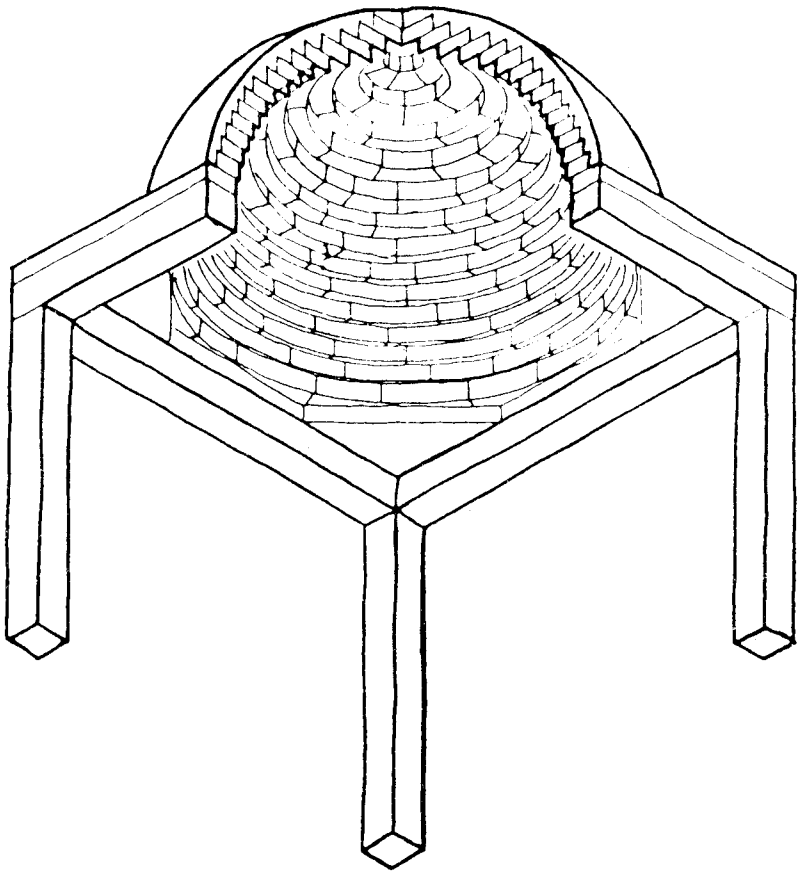


Fig. 3 Vijayanagara, Elephant stables, corbelled construction of a dome.

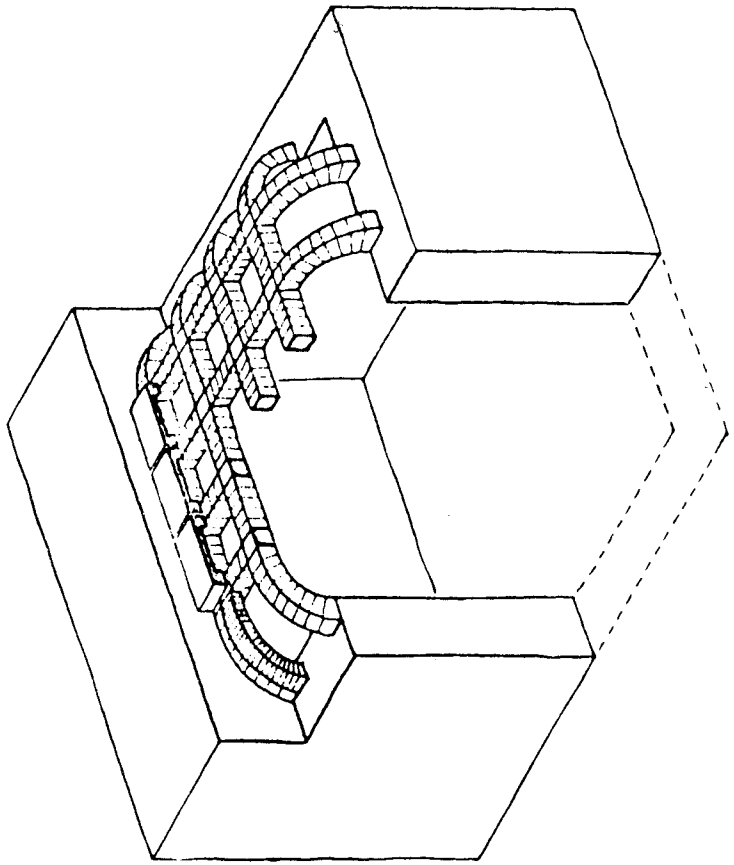


Fig. 4. Bijapur, Ibrahim Rauza, vaulted superstructure.

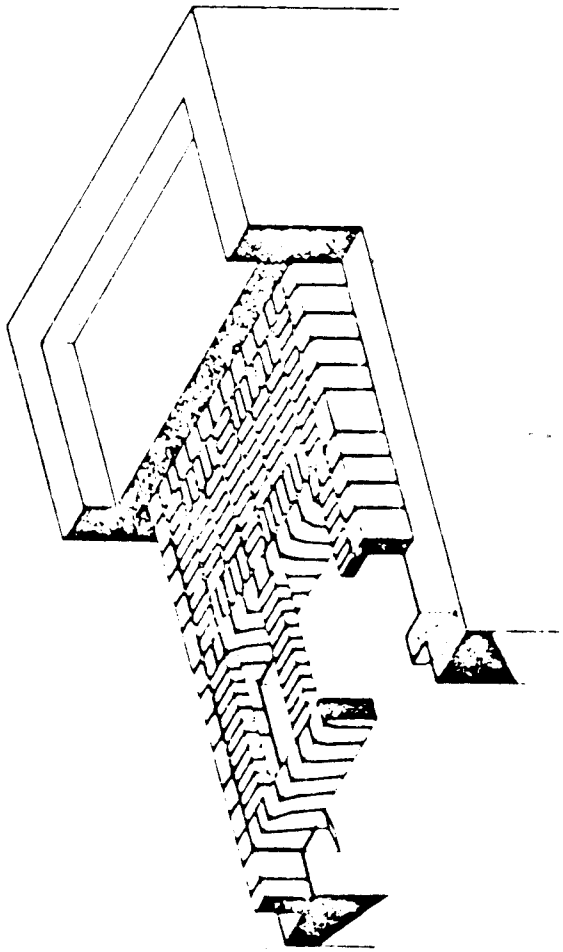


Fig. 5. Kurnool, stone and plaster vaulting.

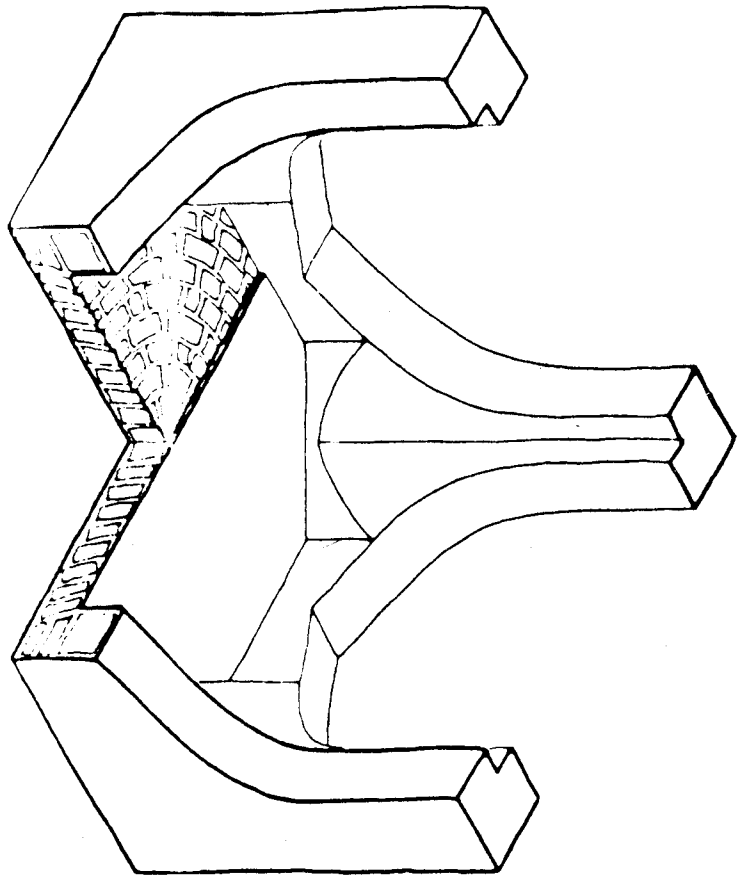


Fig. 6. Golconda, combination of squinch and pendentive in vault.

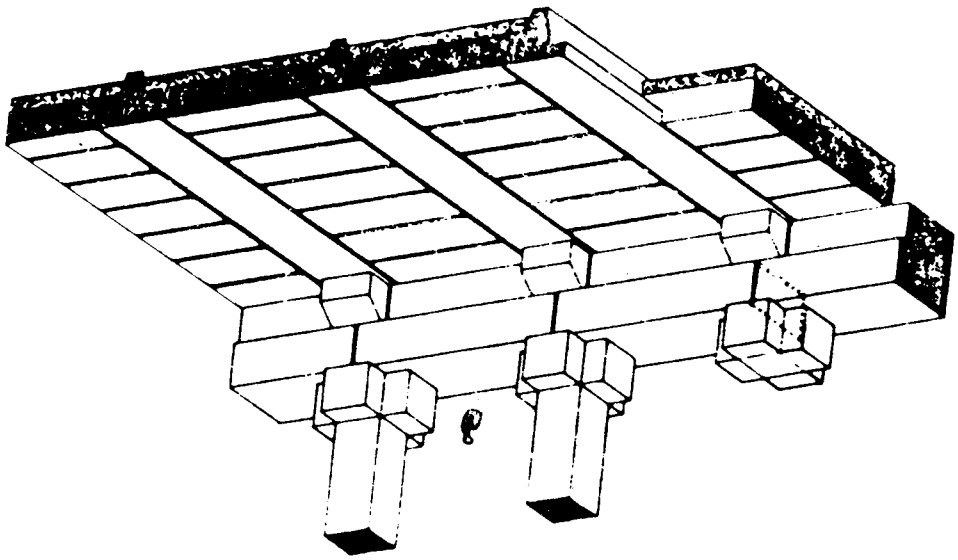


Fig. 7. Vijayanagara, Raghunatha Temple, vault made up of inverted T-beams, placed on pillars.

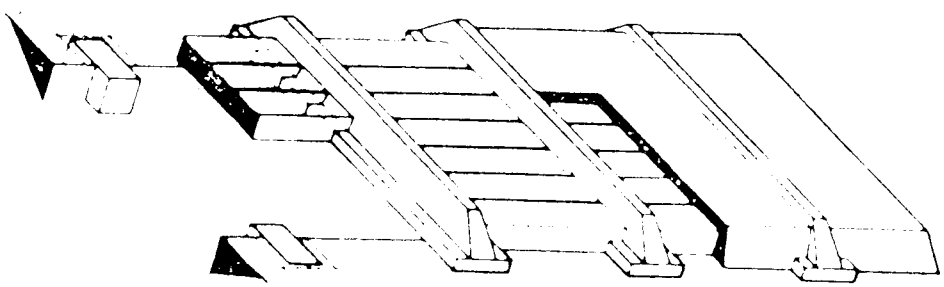


Fig. 8. Vijayanagara, Lotus Mahal, flat ceilings spanned by inverted T-beams.

SECTION III

The Architecture of Everyday Life



CHAPTER III.1

Characteristics of a Stepwell*

JUTTA JAIN-NEUBAUER

The Term



The term 'stepwell' itself indicates the basic features of architecture and functions of this peculiar kind of well-monument, which is to be found in some parts of India, but which received extraordinary monumentality and elaboration in Gujarat only. Both the parts of the term, i.e., 'step' and 'well', characterise its inherent features. A more correct term could be a 'staircase-well' or 'stepped well'. It is actually not the step or rather the steps, but the long stepped corridor leading down to five or six storeys, that is one of the major constructional elements in a stepwell. Both parts of the term combine a statement about the function (i.e., the well) and the typical architectural feature (i.e., the stepped corridor). The term 'stepwell' which identifies this peculiar type of well-monument dealt with here will be retained for the sake of convenience and to avoid misunderstanding by coining a new term. This term was already introduced in earlier writings on western India and its architecture,[1] and has now established its own specific denotation. The term 'public well' was occasionally used,[2] which could be applied to a large number of stepwells, but not to all. Therefore, a term classifying these well-monuments with regard to their architectural structure, rather than their civic and social use, is preferable. As for the German language, the term 'Treppenbrunnen' was proposed and is in

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use now, being derived in the same way as the English term from a combination of its two inherent structural parts. Other terms like 'Brunnen' and 'Brunnenanlagen' were also in use in earlier writings.[3]

In Gujarat, the terms *vāv* or *vāvḍi* or *vāi* are in common use as in the region of Idar. In some travellers' accounts they are also transcribed as *bauri* or 'browrie'.[4] In Rajasthan as also in the northern region of India around Delhi and Agra, the terms are *bāoli* or *bāuli*.[5] The Sanskrit term which appears in the classical *śilpa*-texts and in inscriptions is *vāpi, vāpī* or *vāpikā*. It is obvious that modern Indian languages derived their terms from the Sanskrit root.

The Various Types of Well-monuments

A stepwell is but one type of the various existing kinds of well-monuments in India. A stepwell is the most intricate and, from the architectural point of view, the most complicated one. The most basic form of a well-monument is the simple vertical well, called *kūpa* in Sanskrit (meaning 'pit', 'well'), and *kūā* in Hindi and *kūo* in Gujarati. This simple well has no stepped corridor to reach the water level, the water is simply hauled up by buckets. In a stepwell, the vertical well is also called *kūpa* in the classical texts (*kūo* in the local language). The only marked architectural part in a *kūpa* above ground level is the parapet-wall with the arrangement for hauling up water.

A *kuṇḍa* (Sanskrit, meaning 'pit', 'pond'), also called *kuṇḍa* in Gujarati, is an artificially built pond, which is square, octagonal or oblong. A *kuṇḍa* can be of various sizes. In most cases the water level is much below the ground level, so that spirals of steps and staggered lateral staircases lead down to the water level. This stepped descending passage is mostly embellished with platforms, small shrines, niches and pavilions. Often a *kuṇḍa* is connected with a temple or situated within the temple complex. Either in the middle of the *kuṇḍa* or on one side there is a vertical well (*kūpa*) with a spring which guarantees a constant flow of fresh water. *Kuṇḍa* of intricate architectural structure and sculpture embellishments are found all over Gujarat, for example, in Modherā, called Sūryakuṇḍa, in Kāpaḍvañj, in Bhuj, in Iḍar, among others, as well as in Karnataka.

Taḍāga or *taḍāka* (Sanskrit, meaning 'tank', 'lake') corresponds to the Gujarati term *tālāv* (or *tālāo*) and to the Hindi term *tālāb*. It is a lake blocked with an artificially built dam. Profusely structured flights or stairs enable easy access to the water level. Often the beginning of the staircase is marked by flanking entrance halls placed on a raised platform and embellished with sculptures. Examples of such *tālav* are found in Pāṭan (Sahasralinga Tālāv), Dabhoi, Kaṅkavati, Bhadreśvar, Ahmedabad (Kankaria Tālāv) among others. The construction of such artificial lakes is very ancient and goes back to the times of the Mauryan rulers. As the rock inscription of Mṭ. Girnar testifies, Candragupta Maurya (*c.* 322–298 BC) had constructed dams across several rivers and made a tank called 'Sudarśana *taṭāka*' near Girināgara (which is modern Girnar). It was enclosed by embankments (*balikā*) and provided with sluices (*praṇālī*), drains (*parivāha*), etc.[6]

The Main Architectural Elements in a Stepwell

Stepwells are monuments of which the major parts are underground, in some major examples resembling subterranean temples. In most cases, they are richly carved and ornamented with decorative relief work and sculptures. A stepwell consists of three major constituent architectural parts, namely, the vertical well (*kūpa*) with an arrangement for hauling up water by buckets (*ghaṭa-yantra*) the stepped corridor leading down several storeys into the earth starting from the entrance pavilion and ending at the water level of the well; and numerous intermediate tower-like pavilions (*kūṭa*) built as open halls (*maṇḍapa*) in the stepped corridor.

The first pavilion at the entrance (*mukhamaṇḍapa*) in front of the stepped corridor is normally a simple, open, pillared hall, either square or oblong in ground plan as in [the] Vikia stepwell near Ghumli or cross-shaped as in the stepwell in Limbhoi. Most often the entrance pavilion is on a raised platform to be approached on three sides by steps, the fourth side leading down the corridor. Sometimes the *mukhamaṇḍapa* is missing and the stepped corridor begins simply with some steps. In several cases, however, recalling the early feature of the *kuṇḍa* of Rajasthan (as in Osian or Abaneri), the entrance to the stepped corridor is flanked by lateral gate-towers (*pratoḷī*) leaving the space between them as an entrance, as in the Rudabai stepwell in Adālaj.

A flight of steps leads to the lower-lying storey being the first pavilion (or first *kūṭa*). The stepped corridor descends further in a flight of steps to the second *kūṭa*, now with two storeys underground and one above ground level (if existing), being in one horizontal line with the entrance pavilion (*mukhamaṇḍapa*). In this way, the flights of steps

proceed downwards into the earth interrupted at regular distances by the tower-like *kūṭa*, from one storey to another, till the water level is reached. In some of the larger stepwell-monuments, the last pavilion is sometimes six or seven storeys underground. Occasionally the number of storeys in the pavilion-towers (*kūṭa*) does not increase only by one, but by two, as in the Vikia stepwell near Ghumli.

Often there is a quadrangular or octagonal pool at the lowest level. This pool is surrounded by a circumambulatory passage with pillars, pilasters and decorated with niches. The area around this pool—open to the sky in its inner space—is alluded to in the ancient *śilpa*-texts by the term *āṅgaṇa* (Sanskrit, meaning 'courtyard') in the higher storeys, a low parapet wall consisting of a stone bench and the sloping backrest (*kakṣāsana*) encloses the open space allowing a view of the pool underneath. The inner ring is profusely carved. In this manner the negative tower of pavilions coils up storey-by-storey till it reaches ground level. In numerous stepwells, additional supporting frameworks bar against the thrusts of the side walls. Water-channelling systems, cisterns and troughs for watering animals and bathing-places for men and women are found in numerous stepwells, such as Dāvad, Bakhor, Chāraḍa, Dādā Harīr and Visavāḍa.

Location of a Stepwell

A stepwell can be located at three different places—connected to a temple or housing a temple or a shrine inside; within or at the edge of a village, as the Rudabai stepwell in Adālaj, the Chaumukhi stepwell in Chobari, the stepwell in Chatral and Limbhoi, among others; and at the sides of overland roads or completely outside villages or settlements, as the Ra Khengar stepwell near Vanthali, the stepwells in Kaleśvarī ni Nāl, the Bhagat stepwell near Modāsā, the stepwell outside Kāpaḍvañj, among others. In some of these cases it is not clear whether the stepwells had earlier belonged to a village, which has disappeared.

The stepwells of the first category, being connected with a temple, could be of various types, namely, situated either adjacent to a temple as the Jīva Mehta stepwell in Morbi next to the temple of Kubernath, the Nāgā Bāvā stepwell in Dhrāngadhrā next to the shrine of the Nāgā Bāvā, the Āsāpurī stepwell next to the temple of Āsāpurī, or they could be situated in the temple compound or in the case of an Islamic monument, in the compound of a mosque, as the Jethābhāi stepwell in Isānpur and the Dādā Harīr stepwell in Ahmedabad. The shrines housed in

stepwells are mostly built in the opposite wall of the well or located just in front of the well in the last pavilion-tower as in the Sindhvai Mata stepwell in Dāvad, among others.

The Functions and Use of a Stepwell

The main function of a stepwell is to supply water. In Gujarat, where the climate is such that water is available in plenty only for a few months during the rainy season, ponds, reservoirs, wells and stepwells are the most important civic edifices. Rivers, rivulets, creeks and natural depressions which had been filled with water during the rains, dry up within a few months. Artificially built pools, ponds, reservoirs and tanks also cannot keep their water for a long period. Moreover, the water becomes stale after a certain time. Wells and stepwells, sunk deep into the earth and not exposed to heat and sun too much, are the only source for water.[7] Wells, deriving their water from underground springs, receive a constant flow of fresh water filtered through the earth. This ideal situation, also expressed in the classical *śilpa*-texts,[8] is often contradicted in practical life. In the nineteenth century and the beginning of the twentieth century, there were numerous cases of the English authorities ordering the closure of wells, because it was observed that insects and other disease-carrying germs were breeding in the well-water and this was the source of the outbreak of many epidemics.[9] The reason for the fast spread of diseases was that a well was used in common by large numbers of inhabitants of an area.

Existence of elaborate stepwells testifies to the fact that the utilitarian function of supplying water was held so important that the ordinary wells which would fulfil their function as well were rendered into large monuments, often of high architectural and artistic merit and decorated with rich, well-proportioned ornamentation. Stepwells not only supplied water for use in households and for personal needs like washing clothes and bathing, but also for watering animals and irrigation of fields. For this purpose at the rim of the well there is a sluice to receive the hauled-up water and leads into a trough or pond, from where it runs through a drainage system and is channelled into the fields.

The location of stepwells within the village or settlement indicates that the stepwell not only served as a water source, but also as a cool and fresh retreat for the villagers in the hot season. The method of construction with platforms, galleries, ledges for reaching all the storeys in the galleries, stone-benches with sloping backrests, the numerous

additional spiral staircases, the occasional existence of circumambulatory passages around the well and also the beautiful ornamentation with sculptures, niches, friezes, and designs would allow one to come to this conclusion. This is also testified to by various accounts of travellers coming to this part of India, for example, James Tod saying that stepwells '. . . in hot weather form a delightful retreat for the chiefs and their families'.[10]

The position of stepwells outside the settlements and on overland roads and cross-roads indicates that these underground water-monuments were frequented by travellers and caravans as resting places.[11] One can observe that on the major military and trade routes from Anāhilvāda Pāṭan in the north to the sea coast of Saurashtra at Somanath Pāṭan, *via* Muñjpur, Jhiñjhuvada, Viramgām, Vaḍhvān, Saela, Dhandhalpur, Chobari, Ānandpur, Sardhar, Gondal, Vīrpur, Jethpur, Junāgaḍh, many important stepwells are located. For caravans and individual travellers, a stepwell was the end and aim of a day's journey, where one could spend the night in cool, comfortable surroundings and also where there would be no need to search for water for men and animals. Stepwells were used as suitable and cool places not only for a night's halt, but also for resting during the uncomfortable and suffocating heat of a summer day. The scarcity of trees and vegetation in this area made caravans and travellers proceed only during the evening and night hours. It is known that the great trade route through the Gangetic plain was already of importance during the times of the Mauryan empire, as the road was marked by milestones and comfort was provided by wells and rest-houses at regular intervals.[12] As MacMurdo, who had extensively travelled in Saurashtra, remarks:[13] 'We passed two Boweries of very ancient structure; but originally intended for the accommodation of travellers.' The comment to the term 'Boweries' alludes to the social aspect of a stepwell, that it is '. . . furnished with a descent to the water by means of a long flight of steps and with landings and loggie where travellers may rest in the shade'. The religious significance of a stepwell with a temple or shrine is also referred to by MacMurdo in these words: 'The liberal practice (which) is so universal throughout India has its rise (I believe) in a religious motive . . .'[14]

Tod sees stepwells mainly as a profane and utilitarian monument as many of his contemporary travellers and writers on western India did. He remarks: 'We may include in the domestic structures those useful and ornamental excavations called baories, which serve both as reservoirs and abodes in the hot season.' He also observed that the walls have

to be built strong enough in order to sustain the external pressure of the soil around.[15]

Another interesting feature of a stepwell, well or pond is provided by the soil ingredients. The minerals, salts or other substances of the earth dissolved in the water of the well often have the quality of brightening or strengthening materials, either cloth like satin, silk or cotton, or metals. It is said, for example, in the *Mirat-i-Ahmadi*[16] that 'cotton-clothes, embroidery and satin' increase 'in lustre and colour', if they are washed in the wells of Kankaria tank in Ahmedabad. When in the summer months the tank dries up, water from nearby wells is poured into it and mixed with the mud at the bottom, then it regains its brightening quality. Of another stepwell, near Una (in Southern Saurashtra), called Sari-stepwell it is said[17] that its 'water adds to the temper and sharpness of swords. The Una swords are hence famous in the land.' During field-work in Kāpaḍvañj, a reliable native informant told me that the stepwells there were formerly very famous for the mineral quality of their water. I was informed that formely the silk weavers used to bring their products to Kāpaḍvañj to wash in the stepwells in order to brighten their colours.

The Stepwell as a Shrine

A stepwell combines a utilitarian (being a source of water) and social function (being a meeting-place for communication for men while resting and for women while drawing water) with satisfying the spiritual needs of the people. Even today, stepwells are not only edifices of domestic and social use, but are believed to be abodes of various spirits of life-giving powers. Just as any other godlings, ghosts or spirits, the stepwell-dwellers are believed to give progeny, fertility, growth and wealth if propitiated and worshipped in the prescribed manner. Many stepwells are closely connected with a temple, situated as they are in the temple compound itself. Jaina literature[18] and some inscriptions[19] say that along with a temple a stepwell was also constructed. This is further corroborated by the actual examples of a shrine within a stepwell, as in the Mātā Bhavānī stepwell in Ahmedabad, the Aṇkol Mātā stepwell in Dāvad and Sindhvāi Mātā stepwell of Pāṭan. These shrines are even now frequented by worshippers who perform their religious rites as they would do in a temple or shrine.[20]

The closeness of a water place is prescribed for the location of a temple in canonical scripture[s], for example, when it is said: 'In places

without tanks, gods are not present. A temple therefore should be built, where there is a pond on the left, or in the front, not otherwise.'[21] Also the *Tantrasamuccaya*[22] suggests the installation of gods at lovely places like *tīrtha* (sacred bathing-ghats on the bank of river), banks of rivers and lakes, and on the seashores. In case water is not available either in natural or artificially built tanks or ponds, jars filled with water represent the water place.[23]

The numerous myths connected with water show that from ancient times water was considered as the prime source of life. Water is not only the most essential commodity of life in hot and arid areas, but is generally considered to possess the innate powers to protect and maintain life and growth. The use of water as an essential part in sacrifices, the connection of water places with fertility rites (the offering of grains at a tank)[24] and mother-goddess worship (the names of stepwells commencing with Mātā, meaning 'mother', i.e., 'mother-goddess'), the high merit that a person receives for digging a well or stepwell, support this idea.

In Vedic times the rivers were compared to a cow, the symbol of wealth, fertility and prosperity.[25] The metaphor is consequently visualised as the waters becoming swollen like pregnant cows which had previously been sterile[26] or as the imperative order to Mitra and Varuṇa: 'Yoke the waters like a cow to the yoke.'[27] In this connection it is very interesting to note that a *pariśiṣṭa*-text describes that during the consecration ceremony of a well or pond, a cow has to be decked and then brought into the water of the well.[28] Only after this ceremony, the water place becomes sacred. Belonging to the same train of thought is the identification of water with milk, the product of the cows.[29]

The simile of the waters with the growth and wealth-bestowing cows implies the waters are seen and praised as goddesses. They have the ability to cleanse and purify the worshipper from moral sins[30] and to bestow long life, wealth and immortality.[31] As goddesses, they are addressed and worshipped as mothers, as the mothers of all beings, mobile or immobile.[32]

The power of fertility is not only innate in natural waters like rains, rivers and lakes, but also in all artificially kept waters like an artificial lake, pond, well or stepwell, or even a jar of water. Water itself came to represent the essence of the mythical waters issuing from Indra and Varuṇa.[33]

A simplification of abstract Vedic ideas is found in the popular belief that wells, when worshipped by women who have less milk to suckle their children, will bestow plenty of milk again on them.[34]

By constructing ponds, wells and reservoirs, it is said, men have

actually realised the potential of achieving the powers described earlier. Their construction was held as of higher merit than even the performances of a sacrifice according to the Vedic and post-Vedic prescriptions.[35] Charitable deeds, as in the building of a public well or stepwell, brought more merit than the performing of a sacrifice to please the gods, which is only for one's own benefit. It is said in the *Viṣnudharmottara Purāṇa*,[36] for example, that 'One who digs a well (for the public) has (the consequence of) half of his sins absolved when the water has begun to flow forth; one who dedicates a pond is forever happy (free from thirst) and attains the world of Varuṇa.' Many more literary evidences[37] show that charitable works for the use of the public came to be regarded as more meritorious than sacrifices and offerings to the gods and gifts to the Brahmans.

Digging of a well or construction of a pond gives the possibility of obtaining the life-bestowing water, but the act of construction alone does not guarantee its permanent and everlasting flow. To attain this aim, a sacrifice is to be offered to the water, i.e., the water-god or goddess. Such rituals are still observed, as was seen at the Mīnal stepwell in Vīrpur, Saurashtra, in 1977, when women and girls went to the stepwell with offerings to Mīnal Devī, the patron-goddess of the stepwell. They offered gifts of coconuts, grains and milk to the goddess in order to obtain a good husband, progeny and prosperity. We observed that the image was actually a sculpture of Viṣnu Śeṣaśāyin which was mistaken to be that of Mīnal Devī, Viṣnu's upraised arm to be her child in her arms. Watson[38] also observed a similar incident at the Hani stepwell in Dhandusar, Saurashtra. The folk song connected with the Mādhā stepwell in Vaḍhvān,[39] Saurashtra, illustrates clearly this idea that the constant flow of water is to be secured by a sacrifice. This song is the crystallisation of the general belief that human sacrifice is the most potent, in exchange for which life-bestowing powers are yielded for the benefit of the community.

Self-sacrifices, with the same intention, were recorded in Gujarat in earlier times.[40] Nowadays blood from a finger of a man could take the place of the actual human sacrifice.[41] Minor offerings to please and honour *jaladevi*, the goddess of water, are copper-coins and betel-nuts, and flags hoisted near the well,[42] as a popular continuation of the prescriptions in the *śilpa*-texts for constructing flagpole with a flag near the stepwell.[43]

According to popular belief in Gujarat a mother-goddess called Vāruḍi or Vāruchi Mā, also Vāreodi Aī (and later on Sanskritised to Vardhayinī or Varadākṣinī) is believed to reside in a stepwell, or also

on the coast of the sea, or bank of a river or pond.[44] She is supposed to be a goddess of fertility and worshipped to bestow good crops. It is also interesting to note that young brides or couples immediately after marriage go to a well or stepwell to do homage to the water-deity so that they might receive a boon of fertility.[45] Of a similar significance is the rite performed by a young mother after the birth of her first son. This rite purifies her, as a woman in childbirth is held impure, and secures longevity for her child. This ceremony starts with a procession in which the young mother is taken out to the well or tank, where she instals *jaladeva* and *saptamātṛkā*, the seven mother-goddesses. She brings offerings of foodstuffs and fetches water. Without propitiating *jaladeva* in this way, she is not entitled to fetch any water. Such rites are common to all Hindu castes that believe in the impurity of a woman after childbirth,[46] especially among the Mer community in the Barda Hill area[47] and the Kanbis, a pastoral community of Saurashtra.[48]

In Gujarat the cult of the mother-goddess is very intimately connected with water or watering places.[49] It is said, for example, that at the festival of *navarātri*, the 'nine nights' sacred to the Great Goddess, Varuṇa, the god of the waters, is to be invoked and worshipped after the initial worshipping of Ganeśa during the household rites.[50] A clear indication of the association of stepwells with mother-goddess worship can be discerned in the fact that many stepwells are shrines sacred to one or other aspect of the Devī or Mātā. This is revealed in the names of stepwells, the actual monuments and those referred to in literary sources. Examples of this are the Mātā Bhavānī stepwell and the Āsāpuri stepwell (both in Ahmedabad), the Sindhvāi Mātā stepwell (in Pāṭan), the Aṇkol Mātā stepwell (in Dāvad), Mātrī stepwell (in Kaṇkavatī) and the Śikotārī stepwell (in Peṭlad, Kaira district), etc.[51]

There are many inscriptions which tell of ladies of the royal houses or of high class families who were patrons for building a stepwell, for example, Rani Rūdadevi, wife of the Vāghelā chief Vāirasiṁha of Dandahideśa, during the reign of Mahmud Begarah (AD 1458–1511) who had built the stepwell in Adālaj in the year v.s. 1556, corresponding to AD 1500;[52] Bai Harīra, also known as Dādā Harīr, the 'general superintendent at the door of the Harem of the King (Mahmud Begarah)' who 'got a stepwell built' in order to please God 'and for the benefit and use of the 84 lakhs of the various living beings' in the year corresponding to AD 1499 (in Ahemadabad);[53] Mīnal Devī, mother of Jayasiṁha Siddharāja (AD 1094–1144), who built the Mīnal stepwell in Vīrpur, Saurashtra, in v.s. 1150 (i.e., AD 1095);[54] and Udayamati, consort of Bhimadeva I, who patronised the building of the Rani stepwell in Pāṭan.[55] One other

inscription is important, not only from the point of view of female patronage, but also giving evidence of the use of a stepwell as a *tirtha*, a sacred place for worship and pilgrimage. It says: '. . . She (Mai Śri Kapura) with her victorious son Saha Śrī Sartanaji, caused a *tirtha* to be made called Tara Vapi for the merits and welfare of her son Tarachandra, his eleven wives (who had become *sati*) and his sons. May there be happiness. May this pleasant and propitiating pure *tīrtha* in the form of a *vapi* with a large *maṇḍapa* endure as long as sun and moon exist. May there be wealth, Śrī.'[56]

In many stepwells a shrine is installed. It is either at the far end at the back of the well shaft itself, or more often on the platform immediately in front of it, i.e., in the last pavilion tower of the stepped corridor. Some examples of these are the Mātā Bhavānī stepwell in Ahmedabad, the Sindhvāi Mātā stepwell in Pāṭan, the Aṇkol Mātā stepwell in Dāvad. In the Jñāneśvari stepwell in Mādhera and the Ganga stepwell in Vaḍhvān, the small shrine is not installed at the far end, but in the first pavilion. In other cases, without an actual shrine, the sacredness of the well-part is indicated by a sculptured row of shrines, or niches indicating shrines. An important example is the stepwell in Khedbrahmā, and the stepwell in Sathamba, where the wall in the well is fully sculptured. This tradition of 'Hindu' origin was continued during the Muslim period, as seen in the Dādā Harīr stepwell. One of the major decorative features is the niches filled with an intricately carved scroll design, in the back wall of the well, one each on every storey.

The association of mother-goddess worship with watering places is age-old and perhaps forms an intrinsic feature of the mother-goddess cult. It is said that the *śaktī tīrtha*, the sacred places of the female power *śaktī*, are necessarily combined with sacred ponds (*kuṇḍa*).[57] Since ancient times the association of the mother-goddess in the form of a female nude with a water-animal, i.e., the alligator, seems to have been conceived.[58] This connection of the mother-goddess with the waters could be traced back to some passages in the *Ṛgveda*. In many verses of this text, the waters are praised as a goddess; in their anthropomorphic form they are *apsaras*, i.e., heavenly beauties, and they are seen as mothers or young wives.[59] The belief in the purifying and protecting powers of the waters is related to the domestic ritual, in which water is placed near a woman during childbirth.[60] This practice is continued to the present time.

After establishing the connection of the mother-goddess cult with the element water, it is interesting to see how local belief worked to maintain a continuity in the flow of water and, through this, the innate powers

of the waters in wells, stepwells and ponds. It is known that people make various sorts of vows at watering places, mostly for progeny, fertility and wealth, and on fulfilment of their wishes they give the promised offerings to the water-deity. These could be grains, rice, fruits, milk, animal-sacrifice, or even human sacrifice or self-sacrifice.[61] The great goddess, who is believed to be residing in the waters, is propitiated in the most potent way by a sacrifice of human life. There is a legend connected with the Sahasralinga Tālāv that a human sacrifice was needed in order to regain water in this tank which dried up due to a curse.[62] The folk song of Mādhā stepwell in Vaḍhvān is another testimony to this practice.

The belief in strength and valour that may pass from the living body of a human to a man-built edifice for its durability, effectiveness and longevity was deep-rooted in ancient times. The *Yajurveda* refers to human sacrifices being offered in order to strengthen such vulnerable points as fortifications, city-gates and dams.[63] For this, the victims had to be buried in the foundation of the new construction. In the *Ṛgveda* there is a legend of a human sacrifice to Varuṇa.[64]

It is also interesting to note that a site near the water, either river, pond, well, or stepwell, was the obvious place for the self-immolation of a woman after her husband's death (*sati*), as related in folk songs and legends, travellers' accounts, and inscriptions. François Bernier observed an incident of a woman sitting on a pile of firewood in a dry pond.[65] An inscription found in an ancient well mentions the self-immolation of three widows on the bank of the river Sabarmati.[66]

During the installation and consecration ceremony of a stepwell, its association with the water-god Varuṇa and fertility gods like Viṣnu and Narayana becomes at once obvious. The main intention of the ceremony is the dedication of the stepwell to public use as a charitable act. The earliest account of the procedure of dedication of a well or tank in literature is found in the *Saṁkhyāyana Gṛhyasūtra*.[67] Varuṇa plays an important role in this ceremony, as the donor (of the well) has to bring offerings to this god. During the whole ceremony he is invoked in several verses from the *Ṛgveda*. Also, the gods of the directions are to be propitiated. A later text gives with slight variations the same prescriptions, adding that sacrifices are to be made to gods Agni, Soma, Varuṇa, Yajña, Ugra, and others.[68] The presence of a cow makes the water sacred. Other references to the consecration of wells, ponds, and stepwells are found in Paurāṇic texts which came to be held as the most authentic ones to be followed.

In the description of the consecration of a tank, pond, or well in the *Agni Purāṇa* (Chap. 64), it is clearly said how close a connection there is between Varuṇa and the element water.[69] The pond or well being the receptacle for water receives through this ceremony the same sacredness as the water itself. In the consecration ceremony described in this text, Varuṇa figures as the main idol. His image is made which—having had life bestowed though its principal *mantra*—consecrates the water-monuments as he is immersed in the water of the pool, pond, stepwell, or tank. The iconographic description of the Varuṇa idol as given in this text is as follows: It may be of gold, silver or precious stones. It should have two arms and be seated on a *haṁsa*, the goose, the right hand being in the *abhaya* posture and the left carrying a snake-noose. Snakes should be represented around him. The most important part of this installation ceremony is the placing of eight pitchers filled with different types of water in the eight main cardinal directions, i.e., in the east filled with sea-water, in the southeast with water from the river Ganga, in the south with rainwater, in the southwest with streamwater, in the west with riverwater, in the northwest with water from a male river, and in the north with [the] juice of plants. Not only in the location of the water-pitchers do the directions play a basic role. The gods of the directions, Mahendra, Agni, Yama, Nairṛti, Varuṇa, Vāyu, Kubera, Iśāna, along with some other gods like Datṛ, Rayaspośa or Jaleśvara, are to be propitiated dutifully with oblations (*homa*). Then the image of god Varuṇa is carried around the village and thereafter immersed in the pond. A sacrificial post—driven into the centre of the bed of the pond, stepwell, or tank—marks the sacred spot. Finally, at the end the text declares that the consecration of a water-reservoir or pool brings more religious merit for a person than performing the *aśvamedha*, the royal horse sacrifice. This last statement becomes more meaningful considering the climatic and environmental conditions in western India, where water, being the vital necessity of life, growth and fertility, is in great demand throughout the year.

Later texts[70] describe a more or less comprehensive ceremony of the consecration of wells, stepwells, ponds, and tanks, which are mainly based on the *pariśiṣta* and *purāṇa*-texts.[71] . . .

Inscriptions and *Śilpa*-Texts on 'Vāpī'

In rendering, the Sanskrit word *vāpī* (f.) also occurring as *vapi*(f.) or *vāpikā*(f.), is normally translated as a 'well, tank, pond, reservoir of

water', as may similar water-monument[s]. The standard Sanskrit dictionary[72] and also the *Śabdakalpadruma*[73] confine themselves to this basic meaning of the term. In some specific cases, the more descriptive phrase 'a well approached by a flight of steps' is used, as it is also mentioned according to Maheśvara's commentary on the *Amarakosa*[74] that *vāpī* denotes a well with a flight of steps in contrast to a *kūpa*, which means an ordinary well. The *Jalāśayotsargatattva* of Raghunandana[75] mentions four types of reservoirs built by man: *kūpa, vāpī, puṣkariṇī* and *taḍāga*.

The uncertainty about the actual meaning of *vāpī* cannot be settled easily. The difficulty is that the context often does not help in defining exactly what a *vāpī* could be. It is clear, however, that a water-monument connected with a well or reservoir is implied. A more specific limitation on the kind of water-monument can only be surmised. The possibility is that the word itself does not denote a specific well-monument, but is used in connection with various types of water-structures, be it an ordinary well, a tank, a pond, or an elaborate well with flights of steps, depending on the accurateness of the writing and the context. Another possibility is that the meaning of the word has changed: in earlier times only denoting a well or any similar kind of simple watering place or reservoir, but in later times having received a more specific denotation of a 'well approached by flights of steps'. When in a text or inscription the word *vāpī* is set in contrast to other types of water-monuments, like *kūpa* (ordinary well), *kuṇḍa* (small pond), or *taḍāga* (big pond or lake), we can believe that *vāpī* in this case means a different type of well-monument, different from those mentioned, i.e., an elaborate well-construction with flights of steps, a stepwell.

According to the Sanskrit dictionary, the word *vāpī* is derived from the root *vāp*,[76] i.e., 'to sow, to strew, to scatter, to heap or dam up', and *vāpi* therefore is 'the pond made by scattering or damming up earth'.

The commonly used Gujarati word, *vāv* or *vāvdi*, is found in inscriptions of the late Middle Ages attached to or found in stepwells, as by that time Sanskrit which was generally used in inscriptions earlier was often replaced by the local language. From these inscriptions about the construction and patronage of stepwells which are still existing,[77] we can conclude that *vāv* is only applied to a stepwell proper, although it happened that people would understand any kind of well by this term. In Rajasthan and also in northern India[78] in the region of Delhi and Agra, the term *bāoli* is in common use, and in the city of Bombay the term *bāvdi* is used. The term even spread up to the hill-region of Jammu,

where at the archaeological site of Gool village (210 km north of Jammu), a large number of *bāuli*[79] (in the report translated as 'springs') were found in which there was sculptured work, including representations of gods and goddesses.

References to *vāpī* can be found in inscriptions, copper-plate grants and stone inscriptions, and in Sanskrit text on architecture (*śilpa-śāstra*). The inscriptions dating from the first centuries AD are earlier evidence of stepwells than the texts which are available only after the beginning of the second millennium.

One of the earliest testimonies to the antiquity of the *vāpī* is found in the stone inscription of the Kṣatrapa ruler Rudrasiṁha which was discovered in Gunda village in Jamnagar district, dated AD 181.[80] It says that during the reign of Rudrasiṁha, the army leader Rudrabhuti had dug and constructed a *vāpī* in the village of Rasopadra for the benefit and comfort of all living beings. From the textual context, we cannot know definitely what kind of well-construction is meant here by *vāpī*. Considering that it must have been an important act to dig a *vāpī*, because the stone inscription deals with it, and that a high administrator of the Kṣatrapa king was engaged in building it, this *vāpī* cannot be a normal or simple well which is to be found in each and every village, but must be a more elaborate structure. We can already think of the existence of stepwells in these early times, as during Asoka's reign 'flights of steps' are mentioned in connection with a well.[81]

The copper-plate grants of the Valabhi kings Dhruvsena I and Dharasena II are additional evidence mentioning a *vāpī*.[82] These inscriptions affirm that the Valabhi kings granted a village or an area of land along with a *vāpī* to a *brāhmaṇa*. In all inscriptions, the term *vāpī* is translated as 'irrigation-well'. As a *vāpī* is specially attributed to in the grants, I am inclined to believe that more than an 'irrigation well' is meant. Such wells exist in all the villages, and it seems to be out of place that the grants should refer to these only, especially because in some instances these wells even received specific names. In a number of inscriptions of the Maitraka period, the donated stepwells bear names of trees or plants. The Amrilika *vāpī*[83] could derive its name from the closeness of either an *āmalaka* or *āmalakī* (i.e., *Emblic myrobalan*, in Gujarati called *āmalī*) tree, and Nimba *vāpī*[84] from the *nimba* (i.e., the Nimba tree or *Azadirachta indica*) tree. Sihadatta's *vāpī* named Mochanika[85] could derive its name from the *moca*-plant, and the Pippala *vāpī*[86] from the *pippala*, the fig tree. About other names, like the Duśa *vāpī*[87] or the Vatabhalirika *vāpī*,[88] it is not clear what their names imply. Some names

definitely point to the owner of the stepwell, like the Bhappabhata[89] *vāpi* or Śīladatta's *vāpī* mentioned earlier. In one inscription the specifying term *jamala vāpī*[90] is used. The Prakrit term *jamala* corresponds to the Sanskrit *yamala*, i.e., 'twin, paired, doubled'.[91] The meaning of this term in connection with a stepwell is controversial. It is translated as 'double cistern' by E. Hultzsch.[92] Considering it to be a stepwell, *jamala vāpī* could either mean 'a pair of *vāpī*', i.e., two such monuments, or a stepwell of the *dvimukha* type, i.e., with two entrances, which will be explained later.

Inscriptions found in southern Gujarat and Rajasthan bear evidence of the existence of stepwells in these areas too. The inscription of the Rashtrakuta prince Govinda IV found at Cambay (dated Śaka saṁvat 853)[93] gives a further clue to the use of a stepwell in earlier times. The profane function of supplying water implied a second, i.e., social and charitable, dimension. As it is indicated here, the grant of villages and of a large number of gold coins is made to the *brāhmaṇa* not only for meeting the expenses of their ritual duties, but also for repairing temples and for building institutions like alms-houses (*sattra*), places for the supply of water (*prapā*), rest houses for travellers (*pratiśraya*), . . . and stepwells (*vāpī*), wells (*kūpa*), ponds (*taḍāka*).

Even today stepwells are not only domestic and functional buildings, they also have a religious significance. Many stepwells are closely connected with a temple, situated in the temple compound or having a small shrine inside. In some inscriptions, this religious aspect of a stepwell is alluded to, when it is said that a stepwell was built and consecrated along with two temples (inscription at the stepwell at Roho, in northern Gujarat).[94] One inscription found in village Sadadi,[95] dated v.s. 1654, corresponding to AD 1597, mentions that a pious lady of Jina faith constructed in honour of her dead son Tarachanda and his eleven wives who became *sati*, a *tīrtha* in the form of a *vāpī*. Very interesting in this connection is the use of the term *tīrtha*, meaning a religious bathing-place, which implies that this *vāpī*, newly built, was meant as a spot for religious worship during a pilgrimage.

It seems that a stepwell in its function of supplying water protects also growth and fertility. Therefore it is not surprising to mark that a large number of stepwells are connected with the cult of the mother-goddess. This is not only revealed in the names of the stepwells mentioned earlier, but also in the iconography of the sculptures decorating the niches and friezes in a stepwell. Nearly always *saptamātṛkā* (the seven mother-goddesses), depictions or symbolic representations of one or the other aspect of the mother-goddess, like Aṁbā, Durga, Mahīṣamardinī, and depictions of a pregnant woman, a woman with child or giving birth to a child appear in the decoration of a stepwell. In this connection it is interesting to observe that girls and young women go to a stepwell to worship an image of the mother-goddess in order to secure progeny and fertility. In this light, the inscription engraved on pillars of the *sabha-maṇḍapa* of the temple at Jagat, Rajasthan, attains greater significance.[96] This inscription refers to the perpetual worship of the goddess Aṁbā Devī by a person who is said to reconstruct and conserve the stepwells (*vāpī*), wells (*kūpa*), tanks (*taḍāga*), gardens, and buildings.

Architectural texts of the northern as well as the southern tradition contain references to *vāpī*. In both cases, however, the chapters concerned with this type of water-monument are short and do not give very detailed information about construction methods, shape, ornamentation, location, etc. Whatever information is given is collected and analysed [here]. The texts being studied in this connection are: *Samarangana-Sutradhara* (*SS*), *Aparājitapṛcchā, Rājavallabha, Vāstusāra* of the northern tradition and the *Mānasāra, Mayamata, Viśvakarma Vāstuśāstra* of the southern tradition. From among these texts, it seems that the *SS*[97] is the earlierst work on the subject to which we somehow can ascribe a rather definite date of compilation. This work was put together by Sutradhara Samarangana under the rule of the Parmar King Bhoja of Dhara (AD 1018–60).[98] The *Aparājitapṛcchā* is obviously a later composition, as it borrows much from the *SS*. Through comparison of the descriptions, in the text and actual datable monuments, Vora and Dhaky conclude that the date of its compilation falls in the latter half of the twelfth century.[99] Both the *Mānasāra* and the *Mayamata* seem to have been inspired by the same kind of earlier source. Both the redactions are very close to each other and it is clear that both come from the extreme south of India.[100] It seems that both were compiled during the peaceful and culturally rich period of the Chola rulers. To the *Mayamata* a date earlier than the eleventh century can be ascribed,[101] although intertextual evidence could point to a later date in comparison to *Mānasāra*.[102] The *Viśvakarma Vāstuśāstra* is a compilation of the southern tradition. Although Viśvakarma is known as the 'god-architect' of the northern people, and the Viśvakarma school of architecture represents the northern, i.e., the Nāgara school, the name Viśvakarma was also adopted in the south and

was applied also to works on architecture of the southern or Dravida school.[103]

The *SS*, the *Mayamata* and *Mānasāra*, considered to be the earlier texts among those dealt with here, do not give any information regarding the method of construction, formation or ornamentation of a *vāpī*. No separate chapter devoted to the characteristics of water-monuments, like *kūpa, vāpī, taḍāga*, as in later texts, is found. All three texts only contain stray references to *vāpī*, and from these it is not clear whether the *vāpī* indicates a stepwell proper or occasionally another type of water-monument. From the references, it seems more likely that a pond rather than a monumental stepwell is meant. Another feature which turns out to be characteristic of a *vāpī* from these very texts is its being a monument for leisure and pleasure.[104] It is said, for example, in *SS*, Chap. II, vv.26–7, that palatial buildings have a *vāpī*, artificial wooden monuments (*dārugiri*), paintings (*citra*), flower-streets (*puṣpa-vīthi*), and manifold parks (*vipināśraya*). In the *SS*, a *vāpī* cannot signify a monumental well-construction with a flight of steps, as it is indicated that the middle of buildings is occupied by a *vāpī*. It is said:

> Chap. XVIII, v.20: In the middle (*madhya*) of the buildings (*śālā*), there generally is what is called a *garbhagṛha*, that is the *vāpī* and lotus pond (*puṣkariṇī*) which are covered (*samachanna*).

Again, the location within the house gives an indication of a pond-like structure for *vāpī* and the setting of it parallel to *puṣkariṇī* alludes somehow to an aspect of pleasure. Similar information is given in Chap. XV dealing with 'The King's Palace':

> Chap. XV, vv.29–30: Creeper-bowers (*latāgṛha*) where creeper-halls (*latā-maṇḍapa*) are attached, the wooden mountains (*dāru-śaila*), the flower-streets (*puṣpa-vīthi*) are well-constructed (in a king's residence) . . . [this part is unclear].
>
> v.31: The *vāpī* and drinking-house (*pāna-gṛha*) are generally made in the section (*pāda*) of Varuṇa, and the treasure-house (*koṣthagāra*) is generally in (the section of) Asura and the weapon-house (*ayudha-mandira*) in (the section of) Sosa.

The location along with the creeper-bower, the drinking-house and the treasure-house within the king's residence point to a small size of a *vāpī*, as a monumental structure would not find enough space within a palatial compound.

Further information regarding the location of a water place given in the above verses is important and needs some more elaboration. The

entire complex for the construction of a sacred or profane building is seen as a huge idealistic quadrangle which is further divided into sixty four or eighty-one square sections.[105] Some texts clearly mention that the division into sixty-four is suitable for shrines, temples, and other sacred places, whereas the division into eighty-one is applied to construction of houses. In this square limitation of the ground the *vastu-puruṣa*, the visually depicted identification of the cosmic order with the human body, is conceived as forming the *vastupuruṣa-maṇḍala* with sixty-four or eighty-one squares. Forty-five gods (*devatā*) occupy the body of *vastupuruṣa*, of which thirty-two are stationed along the perimeter of the *vastumaṇḍala*. These are therefore called *prakāra devatā* or *pāda devatā*.[106] Then follows the inner group of twelve gods surrounding the central section which is reserved for Brahma. The *pāda devatā* are regents of the *nakṣatra*, i.e., the lunar mansions, and are led by the guardians of the four directions, the *lokapāla*, Mahendra in the east, Yama in the south, Varuṇa in the west and Soma in the north. They are stationed in the middle of each side, whereas the corners are occupied by the regents of the intermediate directions, the *aṣṭadikpāla*, beginning from the east: Indra, Agni, Yama, Nairṛti, Varuṇa, Marut, Kubera, Iśāna, according to the explanation given by Stella Kramrisch.[107]

Varuṇa is not only the protector of the west, being one of the *aṣṭadik-pāla*, but generally regarded specially in Paurānic mythology as the god of the ocean and the supreme lord of rains and water. Varuṇa is one of the oldest Vedic deities, often styled as 'king of the gods', in his function as supreme deity is described as upholding heaven and earth.[108] Although he is not generally regarded in the Veda as the god of the ocean, he is often connected with the waters, especially the waters of the atmosphere, and once he is called *sindhupati*, i.e., 'lord of the rivers'.[109] Varuṇa's inherent connection with the waters is popularised in later mythology and he is invoked for sending rain by *mantra* and *pūjā* in seasons of drought and worshipped by fishermen before they go out to sea.[110] His supremacy over the element water gave him various other descriptive names: *jalapati* (lord of water), *yadaḥpati* (lord of aquatic animals), *amburāja* (king of water), *pāśī* (bearer of the noose), his iconographic sign, besides his riding on a *makara*, the sea-monster.[111] In the *Agnipurāṇa*, he is described as god of the ocean and in the *Kaśyapaśilpa* he is conceived as Viṣnu-narayana and *mahā-jala* or *jalādhipa*, i.e., lord of water.[112]

The placing of a stepwell, well or other water-monument in the quarter of Varuṇa seems to be an intrinsic recognition of his being the Lord of Waters, who is able to bestow water even in the season of

drought. The *Agnipurāna*[113] explicitly manifests that Varuṇa is revealed in the form of water. The *SS*, Chap. xv, v.31, is a clear indication for this, stating that the west, the region of Varuṇa, is the most suitable direction for digging a well or constructing a water-edifice. It is interesting that Ram Raz,[114] who was one of the first scholars to study the ancient *śilpa*-texts, also mentions that in a town or village, there should be at least two tanks or reservoirs, one of which should be in the southwest, which could be identified as the region of Varuṇa.

In opposition to this description, however, it seems that the south Indian texts had followed a different tradition. In the *Mayamata*,[115] for example, it is said that a stepwell should be situated in the quarter of Iśa which corresponds to the north-eastern direction according to the above-mentioned concept. In Chap. xxiii, v.86 of this text, it is said:

> The hall for listening to the *dharma* (*dharma-śravaṇa-maṇḍapa*) should be constructed in (the quarter of) Soma (*saumya*), the *vāpī* is connected with (the quarter of) Iśa, the well (*kūpa*) with that of Āpavatsa.

Two other references give less definite indications for the location of a water-monument, saying that wherever one needs a water place, one should construct one. Following are the lines:

> Chap. ix, vv.87–91 a: The stable (*gośālā*) should be in the south, the flower-gardens (*puṣpa-vaṭī*) in the north, the dwelling for the ascetics (*tāpasavāsa*) favourably in the eastern region or in the west.
>
> Wherever a water place (*jalāśaya*) is desired (there should be) a *vāpī* and a well (*kūpa*). The settlements of the Vaiśya are in the south, that of the Sudra all around. . . .

and, while dealing with 'The other monuments' (*itara-sthāna*):

> Chap. ix, v.92: The house of tenants (*veṣa-sthāna*), the *vāpī*, the well (*kūpa*), the pleasure-garden (*rāma*) and the pond (*dīrghikā*) could be considered to be everywhere as well as the habitation of the ascetics (*maṭha*) and the eating-place (*bhukti-niketana*).

The prescriptions given in this text for a *vāpī* are not very elaborate; also they do not give helpful information regarding the location. The text is mainly concerned with stating the locations of various buildings within the area of a town or village, rather than giving more details about their construction and shape.

The *Mānasāra* gives similar information for the location of a well or stepwell. It is said in the chapter dealing with the description of deities belonging to one class:

> Chap. xxxii, v.88: A well (*kūpa*) or pond (*taḍāga*) should be dug in the quarter of Iśa.

The quarter of Iśa corresponds to the north-eastern direction which is the same specification for a water place given in the *Mayamata*. More details are given about the quarter of Iśa in the *Mānasāra* in:

> Chap. xxxii, vv.54–5: In the Iśa-quarter, one should build a temple for the *rudra*-idol; or there also could be hall for the sacrifice (*yajñaśālā*) and the hall where offerings are cooked (*bhoga-maṇḍapa*).

In the chapter dealing with the location and measurements of dwelling-houses (*gṛha-māna-sthāna-vinyāsa*), it is said:

> Chap. xxxvi, v.27: The intermediate space (*antarīkṣa*), the quarters of Agni and Pusana, are suitable for the wells of all castes.

In the chapter dealing with Kingly Palaces (Chap. xl, *rāja-gṛha-vidhāna*), it is said (in verse 100) that a reservoir should be dug in the northwest or southwest. The topic of steps is elaborated in Chap. xxx, verses 85 ff. It starts with an indication that the best artisan constructs steps in houses, gateways, in a hill-region, in stepwells, wells, and tanks and in cities and villages. It continues with verses 119 ff that in a step-well, well, and tank, the steps should be attached all around, in the four directions, in the four corners or in between. The best spot is selected for the main entrance.

The information given is not only concerned with stepwells, but also with the other water places. There is not definitive information as to the actual location of a well, as a difference is made between wells built for people and the one built in a king's palace.

Only later texts, from the twelfth century onwards, deal with types and formations of a stepwell proper, whereas the earlier texts are mainly confined to the location of a stepwell or other water-monuments. The references in these later texts, however, are a more idealised classification of the four types of stepwells which is the same for all the later texts. It seems that the authors in the following centuries took over the classification made originally, and repeated it without any variations. To my knowledge, the earliest reference of this kind to *vāpī* is found in *Aparājitapṛcchā*,[116] a text specially dealing with the north-western tradition of

architecture in Gujarat. This text is ascribed to the tradition of one mythological Viśvakarama, and the redaction, existing in some manuscripts, seems to originate from the twelfth century.[117] Another text, *Rājavallabha*[118] of the architect Mandana from the fifteenth century, repeats without additions the grouping into four, which is also taken over by texts like *Bṛhat-śilpaśāstra* and *Vāstusāra*.[119]

The *Aparājitapṛcchā* seems to be the earliest text to devote a full chapter to 'The discussion of Stepwells, Wells, Ponds, etc.' (Chap. 74). There is even a full paragraph within the chapter on 'The Discussion of all Flags' devoted to the setting up and description of the parts of the flagpole and flag in a stepwell (Chap. 145, vv.25–9). The information given in Chap. 74 is the classification into four types of stepwells, namely, *nandā, bhadrā, jayā, vijayā*, which reads as follows:

> V.9: There are *nandā, bhadrā, jayā*, and as the fourth *vijayā*. Granting wishes is the one called *nandā* with one entrance (*eka-vaktra*) and three pavilion-towers (*tri-kūṭa*).
>
> V.10: Well-adorned is the one called *bhadrā* with two entrances and six pavilion-towers (*ṣaṭ kūṭa*). Difficult to attain, even for gods, is *jayā* with three entrances and nine pavilion-towers (*nava-kūṭa*).
>
> V.11: Facing all directions (*sarvatomukha*) is *vijayā* with four entrances and twelve pavilion-towers (*surya-kūṭa*). About stepwells so much is told; now, my child, hear about ponds (*kuṇḍa*).
>
> These are the four stepwells.

This systematic listing of types without much description does not seem to be a reflection of any actually existing monuments. The perfectionist tendency could be realised in the successive numbering of the entrances from one to four with three pavilion-towers for each entrance. Among the existing monuments, one could trace three of the four mentioned types, namely, the *ekavaktra*, the one with one entrance, the usual type (for example, the Dādā Harīr stepwell in Ahmedabad, the Rani stepwell in Pāṭan, the Vikia stepwell near Ghumli); the *trivaktra*, the one with three entrances, which is not very common (for example, the Rudabai stepwell in Adālaj); the *caturvaktra*, which has four entrances arranged radiating cross-wise in the four main directions from the centre which is the well. There is only one major example existing of this type in Chobari, Saurashtra, the Chaumukhi stepwell. But it is doubtful, however, whether this classification into four was ever meant to be used for identification of actual monuments.

In Chap. 145, it is said that at every stepwell there is a flagpole which is generally erected at the right (or southern) side at the exist of the doors (or entrance-hall). The text describes the construction of the platform, its height, the height of the wooden pole, the situation of the divine vase on top and the length of the flag. The text runs as follows:

> Chap. 145, vv.25–9: At every stepwell there is generally a flagpole (*dhvajā-stambha*). The flagpole is generally erected at the right (southern, *dakṣina*) side of the exit of the doors (entrance-halls, *dvāra-niṣkāsa*).
>
> v.26: The construction of the platform (basement, *pīṭhabandha*) is well done having a height (*unnata*) of one, two or three ells (*hasta*). Then one erects the pole, the best and strong one is of hard-wood (*sāradāru*).
>
> v.27: The total height (*amunnata*) is three, five or seven ells; *jñāna, artha* and *kāma* with these three, it is generally threefold (*trika*).
>
> v.28: On top of it (*tad-ūrdhva*), there should be made the divine vase (*kalaśa divya*) possessing good marks. The flag-stick (*dhvajā-vaṁśa*) is generally over it (i.e., over the *kalaśa*) and the flag (*patākā*) is long (*pralambana*, i.e., hanging down).
>
> v.29: The stick (*vaṁśa*) is normally half (the size of the pole, *stambhārdha*, the flag equal in breadth (i.e., the breadth of the flag is equal to the height of the stick, *vaṁśatulya patākikā*). In this manner the setting up of the flag (*dhvajā-ūdhava*) for stepwells (*vāpī*) should be carried out.

The text is clear, except for the context of the three philosophical concepts, *jñāna, artha* and *kāma*, unless an identification of these with the three parts of the flagpole is meant. But still, meaning and significance of the identification remain diffuse.

The *Bṛhat-śilpaśāstra*, in Book 3, v.532, and the *Rājavallabha* in Chap. 4, v.28, give in very concise form (in one verse of two lines each) the same information about the four types of stepwells, as is given in the *Aparājitapṛcchā*. These texts differ from the earlier one in the use of the term *mukha* for entrance instead of *vaktra*, but otherwise the names *nandā, bhadrā, jayā* and *vijayā* are the same. The *Rājavallabha* refers to the high merit for one who builds a well or stepwell. It says:

> Chap. 4, v.1: Those kings who construct a fort which brings happiness to people and saves them from the fear of enemies acquire the merit of having made stepwells (*vāpī*), wells (*kūpa*), ponds (*taḍāga*), temples (*devabhavana*), gardens (*rāma*), sacrifices (*yāga*) and so on. . . .

The *Viśvakarma Vāstuśāstra*[120] is the only text that gives an elaborate description and an idea as to what a *vāpī* might have looked like. One full chapter is devoted to the 'Characteristics of Stepwells' (Chap. 33)

Not only from this point of view, but also from its interesting contents, this chapter is very important. It reads:

v.1: Having examined (*parīkṣya*) where there is (underground) flow of sweet water, steady (i.e., continuous, *sthiti*), there one should construct a stepwell (*vāpī*) or well (*kūpa*) as it is approved.

v.2: Generally, it is constructed quadrangular (*caturasra*), circular (*vartula*) or oblong (*dīrgha*). A measurement of three, four, or five *daṇḍa*.

v.3: Or even six *daṇḍa* or up to ten *daṇḍa* is generally employed, having four entrances (*mukha*), two entrances or occasionally one entrance.

v.4: The middle part of the bottom (*tala-madhya-bhāg*) has a dimension of ten ells (*hasta*) or more (according to the commentary: the foundation, *tala*, should be constructed ten *hasta* below the flow of water). (On this foundation) the wall (*bhiṭṭi*) is constructed, which is either of bricks (*aiṣṭika*) or of stones (*śailaka*).

v.5: Near the water-level (*jalāntika*), there should be constructed an open area (*āṅgaṇa*) (comm.: a square *āṅgaṇa* which is one *daṇḍa* in length), as it was pronounced earlier, or a second one or even a third one (comm.: in the course of the staircase, i.e., above the first *āṅgaṇa* there is a second, above the second, there is a third); with firm joints pillars are erected, on the construction of pillars there are stone slabs, *pāṭala*, to resist the load of the upper construction, *bhāravahanaksa*.

v.6: With or without pillars (*sapāda, vipāda*), the supporting (*sthāpana*) is done cleverly (with skill, *yukti*). The construction is fixed together firmly. It is beautiful because of pillars and steps (*pādasopāna*).

v.7: An entrance-hall (*mukha-maṇḍapa*) is attached and doors (*kavāta*) and so on are there (comm.: so that children might not fall into the *vāpī*). If the stepwell is circular (*vartual*), then the staircase (*paṅkti*) is in the formation of the coils of a snake (*bhujaṅga-aveṣṭana-ākrti*). It (*paṅkti*) should be constructed firmly. (If not circular) then (it should be constructed) in a straight staircase (*sūtra-paṅkti*). Wise (builders, *budhi*) do not expect (*na-iṣyate*) it (staircase) to be less than twenty-four *aṅgula* (*vihīnam* as in the text has no meaning, here probably meant *va-hinam*, i.e., not less than).

v.9: At the rim (*tīra*), there should be constructed a device for pulling up water (*ghaṭī-yantra*), surrounded by a courtyard (*sa-āṅgaṇa*), so the wise one (thinks). There should be made sculptures of gods (*deva-mūkti*) and ornamentation in the form of *kinnara* (*kinnara-rūpaka*) at the entrances (*dvāra*) and while approaching (*upeta*) to the level (*tala*) for taking baths (*avagāha*) (comm.: one should make exciting images of *kinnara, mithuna* and so on; intended is the installation of idols, *bimba-sthāpana*, of gods for *puṇya* and *darśaṇa*, that is, of Varuṇa and other gods).

The reference to the round staircase in v.8 which sounds at first very strange in connection with stepwells might have a place in its own right, if we look for an example to the actual monuments. One of the five types of existing stepwells is marked as the type with a circumambulatory passage. To this group belong the stepwells which have the stepped stairway descending spirally in a narrow passage or as the text says 'like the coils of a snake'. The helical stepwell, near Pavāgarh (central Gujarat) illustrates this architectural feature. Some examples of this type have a slightly different architectural layout with a surrounding passage (*bhramaṇa*) around the actual well. Examples of this type are to be found in Mehmudābad near Ahmedabad, in Mandva in northern Gujarat and in Vanthali, near Junāgaḍh (the Ra Khengar stepwell).

The commentary to v.9 is most interesting. Firstly, it mentions images of god Varuṇa, the sea and water-god, to be attached to stepwells and ornamentation of *kinnara* and *mithuna* scenes which are most common on brackets, friezes, capitals, or in niches at stepwells (for example, at Vaḍhvān, Isānpur [and] Dāvad, among others). The term 'level for taking bath' is not easily understood in the abstract and needs elucidation by a view of the actual monuments. Most of the stepwells (for example, the Rudabai stepwell in Adālaj, the Dādā Harīr stepwell in Ahmedabad) have, besides the vertical well, a second reservoir of water at the least, often sixth or fifth, storey underground. This reservoir is mostly square and steps lead down to the water level to make bathing, washing of utensils and clothes and taking water easy. This second reservoir of water is conceived in the construction of stepwells to provide for a cool and fresh resting-place during the day and to keep the water in the well clean, from where it is hauled up by buckets (also the text mentions a device for pulling up water, *ghaṭīyantra*). The area around this reservoir is mentioned in the text as *āṅgaṇa*, the open space. The space around it is open to the sky and is framed by five or six (or the respective number) storeys of gallery constructions forming a kind of inverted tower underground. These galleries provide more space for a cool resting-place, a retreat from the heat of the day, as normally also benches (*kakṣāsana*) are attached, being a railing around the open space.

Important information could be gathered from an inscription found in Kantela, Porbandar,[121] concerning the iconography of the sculptures attached to a stepwell or pond. From the existing monuments, it

has already become clear that the variety of sculptures appearing in a stepwell and pond is very peculiar, as only a few varieties appear out of the lot of iconographical possibilities from Hindu mythology. There are, for example, sculptures of Mahīṣamardinī, Viṣnu Śeṣaśāyin, Ganeśa, Bhairava, Sūrya, Navagraha, Saptamātṛkā and other forms of the mother-goddess, as well as sculptures of women with child or giving birth to a child. So far I came across only one textual evidence that mentions which sculptures are to be attached to a water place. In the above-mentioned inscription, it is stated that Samantasiṁha of the Śrimala family, who was appointed viceroy of Saurashtra by the Chalukya sovereign Visaldeva, repaired Revati Kunda situated on the seashore on the way to Dvŕaka, where Revati used to sport with her husband in ancient times according to mythology. Samantasiṁha caused new flights of steps to be made and also images of Śiva and Viṣnu (as Jalaśayin) together with those of Ganeśa, Kṣetrapāla, Sūrya and Caṇḍikā and also a image of Revati and Balarama. This information is to some extent corroborated by the actual monuments from Gujarat and Saurashtra. The figures of Revati and Balarama, however, seem to be peculiar to the Revati Kunda in Kantela only.

Chronology of the Stepwells Based on Inscriptional, Historical and Stylistic Evidence

One of the earliest monuments connected with the storing and keeping of water that came to light in Gujarat seems to be the 'deep tank or bath' in the Buddhist caves in the Uparkot in Junāgaḍh.[122] The water in this pond-like bath is approached by narrow stairs at the western wall. Staggered stairs of three steps reach down to the bottom of the pond on opposite sides. The pond is surrounded by a circumambulatory passage on three sides, while the fourth, a closed wall to the north, gives through an opening a free view into the next spacious chamber. The supply of water is guaranteed by a channelling system connecting the pond with a cistern and a well outside. A seat-like stone-bench serves as a resting-place at the back wall of the western side of the surrounding passage. The ceiling of the corridor is supported by two pillars on the southern side, which have octagonal bases and round shafts which are embellished with spiral flutes. According to the sculptural decoration in the lower chambers of these caves and the style of the pillars, these were dated to the fourth century AD.[123] Based on the architecture and sculpture of these rock-cut caves in Saurashtra, the Saurashtra style of temple architecture evolved in the successive centuries.

According to some scholars, the oldest example of a stepwell in Navghan Kuo, cut into the rock of the Uparkot in Junāgaḍh, situated a few hundred metres to the south of the above-mentioned Buddhist caves. The construction could be as old as the Kṣatrapa period (second to fourth centuries AD), whereas one scholar believes it as being contemporary with the early Maitraka temples (i.e. sixth/seventh centuries).[124] Some, more examples of rock-cut stepwells are found in the area around Porbandar which are ascribed to pre-Chalukya times. In the Navghan Kuo, a circular staircase (*carika-rohana*), carved out of the natural soft stone and surrounding the well-shaft leads down to the bottom. The simple square pillars and its peculiar construction method indicate its early date. Other authorities, however, believe that the Navghan Kuo was dug many centuries later, maybe by Ra Navghan, and completed by his son Ra Khengar in the eleventh century.[125]

Also the second stepwell in the Uparkot is cut out of natural rock. Its simple structure only consists of the basic stepped corridor, which is extremely narrow, and the deep well-shaft. It is called Aḍī Kaḍī Vāv and is believed to be constructed during the Cuḍāsamā period in the second half of the tenth century.[126] It is known[127] that the Cuḍāsamā ruler Graheripu or Grahario I built the upper fort in Junāgaḍh, called Uparkot, which had already been utilised as a strategically important point by the Maurya and Gupta rulers who have left behind stone inscriptions. According to another source,[128] this Aḍī Kḍī Vāv belongs to the fifteenth century and derives its name from two maid-servants Aḍī and Kaḍī or Ra Navgha. The two wells must have been well known and popular places in earlier times, as a folk proverb says, 'One who has not seen Aḍī Kaḍī Vāv and Navghan Kuo, has lost a great chance in his life.' On the assumption that the Navghan Kuo belongs to the Kṣatrapa period, the two wells of Uparkot are dealt with first, as the construction of both [were] carried out by digging into natural rock, a very early method of creating architectural form, which, however, was continued in later centuries.

The dating of the three stepwells in and near the village of Dhāṅk in Saurashtra has not aroused much controversy among scholars. These seem to be the earliest known stepwells which are structurally built. Their construction falls into the pre-Chalukya period and their date could be ascribed to the early seventh century, during the rule of the Saindhavas in that area. One stepwell which is located about 15 km to

the west of the village of Dhāṅk, near the Bochavdi Nes in the Alech Hills, later called Bochavdi Vāv, is L-shaped and is ornamented with *candra-śālā*, dormer windows. This stepwell might be slightly earlier than the two Dhāṅk stepwells. It is located on the road to Siddhsar and is in a dilapidated condition, with occasional repairs.[129] The two stepwells in Dhāṅk itself are called Jhilanī and Manjushrī stepwells. The Jhilanī stepwell is dated to about AD 600 and the Manjushrī stepwell to the early seventh century, because of stylistic similarities in the niches, pilasters, and door-frames with the contemporary temples of the Saurasthra style, especially the temple of Kadvar.[130]

Next in chronology is the stepwell of Modherā situated to the west of Sūrya Kuṇḍa, the pond in front of the famous Sun temple. It is a very simple structure with one entrance and two pavilion-towers and of moderate ornamentation. The plain square pilasters (of *rucaka* type) and the carved door-frame (*dvāra-śākhā*) depicting lotus-leaves indicate an early date. It is believed, however, that the small *maṇḍapa* above ground level is earlier than the stepwell itself and was fixed onto the second *kūṭa* of the stepwell. The Modherā stepwell could belong to the eleventh century, whereas the small *maṇḍapa* to the tenth century, as also suggested by Dhaky.

The next stylistic period falls into the reign of Bhimadeva (AD 1022–66) during which the most magnificent stepwell was built. It is the Rani stepwell in Pāṭan said to have been patronised by Bhimadeva's queen Udayamati [and] therefore was named Rani Vāv, the stepwell of the queen. Although it is in a dilapidated condition, its earlier grandeur is still to be witnessed in the back wall of the well and in its two pairs of projecting struts (*maḍala*) which are completely covered with beautifully sculptured panels, and in the walls of the stepped corridor which are in the same way embellished with niches, pillars, pilasters, projections, etc. The close resemblance of these sculptures and pillars with those in the temple of Adinatha built in AD 1032 on Mṭ Abu by Vimal Shah, Bhimadeva's minister and later governor of Candravati, could justify assuming both monuments as contemporary to each other.[131] The Aṇkol Mātā stepwell of Dāvad, although of smaller dimensions, in style closely resembles the Rani stepwell. However, the sculptures embellishing the upper pavilion in the first pavilion-tower show a slight development in design and workmanship and could be compared to the dancing hall of the Sun Temple in Modherā and the Nīlakaṇṭha Mahādeva temple in Sunak. The iconography and postures of the sculptures, the designs on the *vedikā*, the leaf-and-branch creeper motifs on the *dvāra-śākhā* and

the lotus-leaf carving on the *jaḍyakumbha* indicate a style belonging to the best of the Māru-Gurjara tradition, most probably under the rule of Karṇadeva (AD 1066–94), successor of Bhimadeva. These points led to ascribing to the third quarter of the eleventh century of the Aṇkol Mātā stepwell in Dāvad.[132] To the same period of the Chalukya rule, the Mātā Bhavānī stepwell in Ahmedabad is thought to belong. Burgess[133] is of the opinion that it might belong to the time of Karṇadeva, who had founded Karṇavati, a city supposed to have been situated in present-day Ahmedabad. More convincing than this statement could be the similarity of the architectural construction of the Mātā Bhavānī stepwell with the Aṇkol Mātā and Rani stepwells having the additional lateral staggered stairs inserted in the stepped corridor. Considering this fact, one could think that these three stepwells are contemporary, at least in their basic ground plan, and that additions or repairs were carried out in the upper pavilions of the Mātā Bhavānī stepwell in later periods. To Mīnaldevi, the mother of the Chalukya ruler Jayasiṁha Siddharaja, the construction of a large number of stepwells is ascribed. She had patronised the building of an artificial lake (*taḍāga*) in Viramagām and also one at Dholkā, and the stepwell in Naḍiad is ascribed to her. Also the Mīnal stepwell in the village of Balej (in Anand *tālukā*, Sābarkaṇthā district) was ascribed to the same patroness, being built in v.s. 1152, i.e., AD 1095.[134] But there are no sculptures to indicate any stylistic relationship. Another stepwell bears the name of Mīnaldevi, the Mīnal stepwell in Vīrpur (in Gondal *tālukā*, Rajkot district), and is attributed by local tradition to the same lady-patron. Although the sculptures in this stepwell are rather dilapidated, one can still observe a few stylistic affinities to the Navalakha temple in Sejakpur, the Navalakha temple in Ānandpur and the shrines in Chobari and Pārbadi, which are dated to the reigning years of the same Jayasiṁha Siddharāja (AD 1094–1144). The clearest detail of stylistic affinity is the *jali*-fretwork making the pediment of the niches, being a combination of foliate and geometrical designs and giving the impression of calligraphy. To the same period of the beginning of the twelfth century belong also the Āsāpurī stepwell of Ahmedabad and the stepwell of Jhiñjhuvada in northern Gujarat.

The Caumukhi stepwell of Chobari, near Ānandpur in Surendranagar district, is stylistically very close to the temple-group of four in Sejakpur, Ānandpur, Chobari and Pārbadi, all located within an area of less than 30 km in radius. The images of Śeṣaśāyin, Śiva-Pārvatī, Saptamatrka, Cāmuṇḍā, Śiva, the Dasavatāra, Navagraha found in the niches in the four entrance passages of this stepwell display the same features as in

these temples.

The two stepwells in Kaleśvarī ni Nāl, in Lunavāḍā *tālukā* in Panchmahals district, having sculptures which are as important as those in the Rani stepwell in Pāṭan, could be ascribed to the end of the tenth century due to iconography and style of the images of Śeṣaśāyin, Saptamātṛkā, the Dasavatāra of Viṣnu and the other interesting idols which are in the style of those of the temple in the Māru-Gurjara style in the same location.[135]

Again, a legend connects the stepwell in Dhandhalpur with Jayasiṁha Siddharāja. It is said that the sovereign was born in this village, when his mother Mīnaldevi was returning from Dholkā to Pāṭan. After coming to the throne, he founded the village of Dhandhalpur, constructed a well in Sejakpur, built the fort of Dhandhalpur and also a tank in honour of his birthplace, being at that time the farthest extension of his kingdom.[136] From the stylistic point of view, it is likely that the stepwell there belongs to this period, although it is rather plain, except for the fanciful variety of bracket-figures, which are in some instances styled in a folk-like tradition.

The middle of the twelfth century, being the period of the reign of Kumārapāla, who succeeded Jayasiṁha in AD 1144 and reigned till AD 1174, is distinguished by the building of numerous Jaina temple due to the ruler's inclination towards this religion. The city of Vayad, ancient Vāyuvaṭa or Vāyupura, has a stepwell which is supposed to belong to Kumārapāla's time. It is situated near the temple of Vāyudevatā, the god of the wind.[137] Cousens dates this stepwell to the thirteenth century v.s., trying to decipher a 'much abraded inscription' on one of the pillars.[138] His suggestion would be in harmony with the dating made according to the order of the pillars, its bracket-figures and the Bhairava sculpture in one niche.

The older of the two stepwells in Vaḍhvān, called the Ganga stepwell, is attributed to the same ruler's period. There was once an inscription dated v.s. 1225, i.e., AD 1169, of which only a few words are readable: 'the brave warrior Śrī Vijaya'.[139] During his survey of monuments, Cousens[140] did not find the inscription anymore, which probably was submerged in water, which was also the case when I surveyed this monument.

The next phase, styled as the pre-Vāghelā period during the reign of Bhimadeva II (AD 1178–1242), is characterised by slower building activity due to political unrest. In this period, to which the Nīlakaṇṭha Mahādeva temple in Miāni[141] (erected in AD 1204) and the temple-complex called Mūladvāraka in Visavāḍa belong, the building of Vikia

and the Jetha stepwells near Ghumli in the Barda Hills took place. These two stepwells, reflecting the magnificent temple of Navalakha in Ghumli, are exquisite examples of style and art traditions of the thirteenth century in the south-western corner of the peninsula of Saurashtra. Also the Jñān stepwell situated in the Barda Hills in the village of Visāvaḍa, not far from the ancient place of Ghumli, is ascribed to the thirteenth century during the time of Bhimadeva II, being slightly later than the Mūladvāraka temple-complex adjacent to it. The stepwell of village Keshav, a small and now broken down stepwell lying forgotten in a barren landscape around the Barda Hills, is supposed to be of the same date as the Jñān stepwell in Visavāḍa. In northern Gujarat, the thirteenth century is marked by the rise of Vāghelā power. The Vāghelās extended their rule slowly to the peninsula of Saurashtra. The minister brothers Vastupala and Tejapāla were the source of tremendous and prolific architectural activity. It is said that numerous monuments, like temples, rest-houses, tanks, wells, etc., were erected by them, for example, the Neminātha temple on Mṭ Abu (built in AD 1231), or the temple on Mṭ Girnar (build in AD 1232). The Ra Khengar stepwell near Vanthali was built during this early Vāghelā period, as is stated in the *Vastupālacaritra*, a biography of Vastupala by Jina Harṣa Gāni (dated v.s. 1497, i.e., AD 1441), that Tejapāla had built a stepwell between Tejalapura or Jirnadurga (i.e., Junāgaḍh) and Vamanasthali (i.e., Vanthali).[142] This stepwell is identified with the Ra Khengar stepwell which is situated on the road between Vanthali and Junāgaḍh and dated to AD 1230–5 by Dhaky on this ground. By the middle of the thirteenth century, the Vāghelās assumed sovereign powers of their state and it was Visaldeva, who was the greatest exponent of building activity. The gateways (*pratoḷī*), temples and the *vāpī* in Dabhoi were built by him and completed in AD 1255. The Satmukhi stepwell in Dabhoi is actually no stepwell at all. The monument built on the bank of the Nagesvar tank is a temple. One distant reason that one could imagine why this temple received the name of a stepwell, i.e., Satmukhi stepwell, meaning 'the stepwell with seven entrances', is that is was built over an ancient well, as it is said that there were many wells in that tank. It is believed that this temple was originally sacred to Śiva and contemporary with the Kalika temple adjacent to the Hīra Gate in Dabhoi, which is ascribed to King Visaldeva, i.e., AD 1255.[143]

The Mādhā stepwell in Vaḍhvān was built during the end of the Vāghelā period by a Nāgar Brāhmana. His statue and that of his wife are still to be seen in the wall of the well. The building of the stepwell is attributed to Mādhā, the minister of the Vāghelā ruler Karan Ghelo

the last of his line.[144] Forbes writes[145] that the builders were two ministers of Nāgar Brāhmana caste, Mādhā and Keshav, of the same ruler. Of the several lines of inscriptions under some sculptures which are much eroded, a date of v.s. 1350, i.e., AD 1294, and the name of Nāgar Sindhu, son of Soma, and Lashami (i.e., Lakṣmi), daughter of Soḍhala, can be made out.[146] Although there is no indication in epigraphy or history to the construction of the Bātris Koṭha stepwell in Kāpaḍvañj, stylistically it is related to the Mādhā stepwell in Vaḍhvān due to the formation and ornamentation of the struts, and to the Vikia stepwell due to the manifold varieties of human figures on the brackets. This stepwell of Kāpaḍvañj, therefore, could belong to the thirteenth century.

To continue with the building activity under Vāghelā patronage, it might be mentioned here itself that the famous stepwell in the small village of Adālaj was built by Rūdadevi, wife of Vīrasiṁha, a Vāghelā king of Mokalasiṁha's line in the region of Dandahi in the year v.s., 1555, i.e., AD 1500.[147] The gate-houses at the entrance and the style of ornamentation at the inner wall of the octagonal shaft of the stepwell in the village of Mandaropur in Kheralu *tālukā* of Mehsāṇa district lead us to the conclusion that it might be contemporaneous with the stepwell of Adālaj.

The fourteenth century is marked with the building of numerous stepwells. The inscription in the Sodhali stepwell in Māngrol, carved on a cross-beam in the stepped corridor, informs[148] us that Vālī Soḍhala of the Modha caste had built this stepwell in v.s. 1375, i.e., AD 1319, during the reign of Ravala Śrī Mahīpāladeva. It is not clear whether this king was a Gohil or a Cuḍāsamā, but it is without doubt that Māngrol passed into the hands of Muslim overlords during the fourteenth century.

The stepwell in the ancient site of Khedbrahma or Brahmaksetra is situated opposite the temple of Brahma. It is a large and interesting edifice, built in grey granite stone. The style of ornamentation with a row of miniature shrines at the back wall in the well could indicate a date in the fourteenth century.

The next three inscriptions in stepwells testify that in the fourteenth century parts of Gujarat were under Tughlak supremacy. The inscription in the Suda stepwell in Mahuva (near Bhavnagar)[149] mentions that in v.s. 1437, i.e., AD 1381, Shajalhudevi, the wife of the minister Sud who was a descendant of the Brahmana, Narayana of the Bharadvaj *gotra*, had built this stepwell, and that in the area King Satyaraja ruled, whereas Gujarat then was under the rule of Phiroz [Firoz] Shah Tughlak. The Hani stepwell in Dhandhusar (in Rānāvāv *tālukā* of Junāgaḍh district)

was built, according to its inscription, by a Vanthali princess called Hani, the wife of the minister Vaidnāth of Raja Mokalsimha of the Cuḍāsamā dynasty in v.s. 1445, i.e., AD 1389, during the time when Gujarat was ruled by Ghiyasuddin under Tughlak authority.[150] Dhaky[151] attributes the date of AD 1333 to the Hani stepwell. The Siddnath Mahādeva stepwell in Dholkā was built, as the inscription says, in the year v.s. 1466 or Śaka 1332, i.e., AD 1409, by Sahadev for the merit of his son Āśāandra, when Muzzaffar was the governor of Gujarat for Sultan Phiroz Shah Tughlak.[152] The stepwell of Sampa, a village in the vicinity of Ahmedabad, is also attributed to the beginning of the fourteenth century, because the inscription on marble plates mentions v.s. 1384, i.e., AD 1328.

The stepwell of Rāmpura, the Rajbā stepwell (in Vaḍhvān *tālukā* of Surendranagar district) seems to have been using the Mādhā stepwell in Vaḍhvān as a prototype, which is about two centuries earlier. With one stepwell in Cambay, this stepwell in Rāmpura is contemporary, their dates being AD 1483 and 1482. The one [at] Rāmpura bears an inscription giving details about the ruling authorities of the area, namely, Sultan Mahmud Bāgarah of Ahmedabad, and the ruling Parmārs Laghdhirjī and Hadi. The Vadvaṇī stepwell in Khambhāt or Cambay (ancient Stambhapūra) was built by Mehar Devak, son of Mehar Sukund of Tamboli caste, while the *sūtradhāra* (i.e., 'the holders of the string') for the construction were Vana and Kheta.[153] The reference to a member of the Tamboli caste who was the builder of a stepwell is extremely interesting, as Tamboli is the caste of *pānvāla*, i.e., the seller of *pān*, the common betel leaf-and-spice preparation. In the last year of the fifteenth century, the famous Dādā Harīr stepwell of Ahmedabad was built by a harem-lady of Sultan Mahmud Begarah in v.s. 1556, i.e., AD 1499, while the *sūtradhāra* and the *sthāpati* (i.e., 'who erects', meaning the supervisor of the construction) were 'Hindus', with names like Gajadhar (Gajjar) Vaiśya.[154]

The stepwells constructed in the Muslim period and under Muslim patronage were built with a slightly different approach and intention, as compared to the earlier times. The religious impact as a worshipping and sacred place, felt in all the earlier stepwells, lost its significance in the later times, subsequent to the reign of the Vāghelās, the last sovereign rulers of Gujarat and Saurashtra. The old stepwell in the village of Sodali, near Mehmudābad and the one in Mehmudābad itself are illustrative examples of this. The Sodali stepwell is ascribed by local tradition to the time of Mahmud Begarah, and the other is also believed

to belong to the fifteenth century. It is cut into solid rock with chambers around the well and might have embellished a pleasure-garden. Two stepwells found in and around Baroda also belong to the fifteenth century. The inscription in one, in the village of Sewasi about 6 km outside Baroda, records its construction in v.s. 1537, i.e., corresponding to a year around AD 1480, whereas on the inscription in the Navalakhi stepwell in the compound of the Lakṣmi Vilās Palace, the seat of the traditional Gaekwad rulers up to recent times, it is stated that it was constructed by Malik Adam, son of Suleiman, in AH 807, i.e., AD 1405.[155]

The sixteenth and seventeenth centuries still witnessed the construction of numerous stepwells. The stepwell of the village of Chatral, situated very close to Adālaj, was built more or less contemporaneously with the famous stepwell there, i.e., the beginning of the sixteenth century. The Nāgā Bāvā stepwell in Dhrāngadhrā in upper Saurashtra with the doorkeeper in royal garments is dated by the inscription to AD 1525, and the Jīva Mehta stepwell attached to the temple of Kubernath, in Morbi situated a short distance to the west of Dhrāngadhrā, could be of the same age considering the style of pavilion-towers, pillars, and sculptures.

The stepwell in Roho is well known to epigraphists[156] because of four inscriptions found in it, of which, however, only one refers to the stepwell itself; the other seem to come from a temple. The inscription mentions that Champa, the wife of Raja Śrī Nānājī, and her daughter had built two temples and this stepwell in v.s. 1616, i.e., AD 1560, a date which is very well attributable to this stepwell, because of the style of pillars, as otherwise the stepwell is plain and not of great architectural importance. Other stepwells of some art-historical importance of the mediaeval age are found in Jhiñjhuvada and Palanpur (north Gujarat).

There are some absolutely plain and simple stepwells with straightforward and basic architectural layout which are very difficult to date and seem to be timeless, in the sense that their architectural features could have been built any time, as, for example, the stepwells in Hampur, Iḍar, Kaṇkavatī or the Jñāneśvari stepwell in Modherā. As they all do not display much sculptural or decorative ornamentation, no specific attribution of style or period can be made. One can assume them to belong to the sixteenth to seventeenth centuries. Also the stepwell of Mandva in northern Gujarat which is similar to that of Mehmudābad, could belong to the sixteenth century, whereas the Sindhvāi Mātā stepwell in Pāṭan displays features of a later structure and is dated in its

inscription in old Gujarati to AD 1633. The Rāvli stepwell in Mangrol also belong to the seventeenth century.

The excellent example of local architectural and sculptural skills is found in the monument of Limbhoi, situated not far from the town of Iḍar. The stepwell is well preserved, and the cross-shaped entrance pavilion and the sculptures of godly pairs, ŚivaPārvatī and Viṣṇu Lakṣmi, testify to the continuation of building and art traditions from the memorable excellence during Chalukya rule into the successive centuries. The words carved into the stone blocks of the stepped corridor in the stepwell in Limbhoi record its date of construction and builder: 'saṁvat 1686 varṣe viśaka sad 3 dane gajādhara govanda', meaning 'in the year (corresponding to AD 1629) in viśaka (month) on the third day of *sad* (i.e., *sud*) (by) gajādhara govinda'.

The Amṛtavarṣiṇī stepwell in Ahmedabad, an interesting monument with an L-shaped descending corridor, has an inscription which is believed to mention the denotation *amṛtavarṣiṇī* to this type of stepwell. The inscription is on two marble tablets in the first pavilion, a Sanskrit inscription on the left and a Persian one on the opposite side. The date is v.s. 1779 and Śaka 1669, i.e., AD 1722 and in the Persian inscription the date AH 1135 is given.[157]

The latest examples of stepwell construction are found in Ahmedabad and in Waṅkāner in Saurashtra. They were executed due to the initiative of individuals for their own material benefit, i.e., in the case of the Jethābhāi stepwell in Isānpur near Ahmedabad for irrigation of fields and orchards and the second as a cool place of pleasure and retreat for the royal family of Waṅkāner. Jethābhāi stepwell was built about 100 years ago using older materials and sculptures to decorate it, and the stepwell of the Waṅkāner palace is only about 35 years old, built by the father of the erstwhile Raja of Waṅkāner. This stepwell is built completely in white sandstone and might be the last monument of its kind to be built, for it is unlikely that anybody would think of constructing a stepwell in our days of electric waterpumps and pipe systems, apart from economic considerations.

The Five Main Types: Basic Architectural Features

The stepwell found in Gujarat can be divided into five main types. This classification is based on the distinguishing features of the architectural

ground plan and structure, and it is not a division according to their historical development or their stylistic grouping. Each type is represented by the architecturally and art-historically most important and authentic examples. Location, historical setting, general architectural structure, architectural elements, sculptural work and decorative ornamentations, iconographic peculiarities and parallel monuments of a similar style and period will illustrate the background and features of each monument.

TYPE ONE: WITH STRAIGHT-STEPPED CORRIDOR AND ONE ENTRANCE

This first type of classification specifies those stepwells having a plain basic structure. The feature which separates it from the other four types is the stepped corridor which is descending in a straight line and has only one entrance. Depending on the size of the monument, the stepped corridor ends at the level of the third or sixth storey underground. The most plain and unostentatious monuments of this type do not have elaborate pavilions: often these are only small, empty spaces marked by four pilasters, without having pillars in between to break up the interior and to support the upper floor. The pavilion-towers with their various levels sustain the thrust pressing against the vertical side walls in the ravine-like stepped corridor. In larger monuments, additional supporting frameworks resting on bressumers and spanning the breadth of the corridor are introduced in-between two pavilion-towers to reduce the distance. Specimens with extremely narrow corridors often do not have these intermediate supporting frameworks.

Type one could be identified with the first group of stepwells according to the classification of the *śilpa*-texts called *nandā*.

Stepwells belonging to type one form the bulk of monuments and therefore it is necessary to classify them in subgroups. These subdivisions are made according to secondary structural elements. Three main categories are marked, namely (*a*) with lateral stairs within the straight stepped corridor; (*b*) with both the supporting structures, i.e., the pavilion-tower and the additional supporting framework; and (*c*) only with the supporting pavilion-tower.

Category A: With Lateral Stairs

The addition of lateral stairs serves as a device to reach more quickly a lower level and to reduce the corridor length as compared to the

system with parallel descending steps only. It is notable that in a pond (*kuṇḍa*) the descending path to reach the low-lying water level is organised as a system of attached lateral stairs in opposite directions to each other in order to combine one platform with the next. As a phenomenon, the appearance of this feature of a *kuṇḍa* in a stepwell is interesting, because the stepwells with lateral stairs belong to the earlier examples which had been built during the period of the Māru-Gurjara style, i.e., the eleventh century, whereas the bulk of stepwells were built in the twelfth to seventeenth centuries. However, in this concise discussion of types, it is not intended to indicate a development of architectural form from pond (*kuṇḍa*) to stepwell (*vāpī*). Stepwells of this category are the Aṇkol Mātā stepwell in Dāvad, the Rani stepwell in Pāṭan, the Mātā stepwell in Ahmedabad and the Bātris Koṭha stepwell in Kāpaḍvañj.

Category B: With Both Supporting Structures

Larger monuments with regard to breadth rather than length of corridor have both the supporting structures. It is a common feature of all the stepwells belonging to this category that their stepped corridor is rather broad as compared to those belonging to the third category which had only pavilion-towers as supporting structures. The reason for this could be the amount of expenditure required for a more elaborate monument, but one can think of other possibilities also, such as the underlying geological features. Known stepwells of this category are the Dādā Harīr stepwell, the stepwells in Limbhoi, Sathamba, Dhrāngadhrā, Iḍar, Hampur, Kaṇkavatī and Sevāsi.

Category C: With Pavilion-Towers as only Supporting Structures

To the third category, having only pavilion-towers, belong the stepwells of a rather monumental size as well as those of moderate dimensions. The monumental ones have a narrow, but rather long-stepped corridor descending about five to six storeys underground. It is amazing that in the Vikia stepwell, the vertical walls of the corridor are held upright only by three pavilion-towers descending for five storeys. Other important examples of this category are the Mādhā stepwell in Vaḍhvān, the stepwells in Khedbrahma, Virpur, Āsāpurī in Ahmedabad, Rāmpura, Ganga in Vaḍhvān, Dhandhalpur, Isānpur and Modherā in Kaleśvarī in Nal. There are some stepwells belonging to this category which are rather plain in architectural structure and ornamentation, such as, for example,

the stepwells in Dhandhalpur, Isānpura and Modherā. The rock-cut Aḍī Kaḍī stepwell, situated in the Uparkot (upper citadel) in Junāgaḍh could also be grouped here, although not structurally a monument. It is one of the earlier known stepwells. The fact that it is cut into the rock and descends deeply inside makes it an important addition to the early stage of stepwell architecture.

TYPE TWO: WITH STRAIGHT-STEPPED CORRIDOR AND THREE ENTRANCES

Type two is a variation of type one, having the same architectural structure and ornamental features, but distinguished by having a threefold entrance, i.e., three flights of steps arranged crosswise and attached to the stepped corridor. Although there is only one extant monument of major importance, this type falls into the classification because of its unique ground plan. In the Sanskrit *śilpa*-texts, it is known as class three, called *jayā*. Representing this type is the magnificent and extremely well-proportioned stepwell in the village of Adālaj, near Ahmedabad, dated AD 1500.

TYPE THREE: WITH L-SHAPED CORRIDOR

Type three has a very peculiar architectural setting and seems to be exclusive to Gujarat, as it is found nowhere else. The ground plan is shaped like an L, i.e., the stepped corridor is not descending in a straight line, but turns at a right angle. The two arms could be of equal length, or the first arm is slightly shorter than the one leading to the well. Of the structurally built stepwells, the one with this formation is the earliest variety, i.e., one stepwell near Dhāṅk in the Barda Hills.

To this type of stepwell the Sanskrit name *Amṛtavarṣiṇī* was assigned in recent publications, on the basis of a Sanskrit inscription which says that a stepwell with the name of *Amṛtavarṣiṇī* was built. In my opinion, this name does not necessarily denote the whole class of stepwells of the L-shaped type, because the meaning of the word is not necessarily a specific name, but more of an attribute to any stepwell, i.e., the Sanskrit term, means 'showerer of nectar'. There is also another inscription attached to a stepwell in which the water of the well is called 'nectar'. The attribute 'sweet' is also a precondition for building a stepwell in the *Viśvakarma Vāstuśāstra* (Chap. 33, v.1). To this type belong the stepwells in Visavāḍa, Dhāṅk, Baroda, Chatral, and Māngrol, besides the *Amṛtavarṣiṇī* in Ahmedabad.

TYPE FOUR: WITH CIRCUMAMBULATORY PASSAGE

This is the most peculiar type of stepwell, deriving this name because of the earlier representatives of this type. The structural characteristic of this type is the circumambulatory passage around the well (*bhramaṇi*). In later examples, this *bhramaṇi* is the main architectural element, and the stepped corridor descending to the water level is omitted. The stages of typological development (not strictly chronological) could be represented as follows: Ra Khengar stepwell, Navghan Kuo, Helical stepwell, stepwell of the Waṅkāner Palace and the stepwell of Mehmudābad.

The Ra Khengar stepwell represents the earliest stage forming the link between stepwells proper and this *bhramaṇi*-type stepwell. A broad descending passage leads down to the water level and a circumambulatory passage surrounds the well. The Navghan Kuo situated at Uparkot in Junāgaḍh still has the stepped corridor leading down, but this corridor does not descend in a straight line, but proceeds angularly as if surrounding the well. More illustrative from this point of view is the Helical stepwell where the stepped corridor is extremely short and after reaching the rim of the well, the passage leading down continues spirally at the inner side of the well. It is probably this aspect of the stairs that is alluded to in the *Viśvakarma Vāstuśāstra* by a 'coiling staircase'. The next stage in this developmental formation is represented by the palace stepwell of Waṅkāner, built only about forty years ago. In this, a stepped corridor surrounds the square well fully and descends in square zigzag formation for three storeys downwards till the water level is reached. The final formation is found in the stepwells of Mehmudābad and Mandva where, instead of the stepped descending corridor, underground rooms and chambers surround the square well on all four sides for two or three storeys. Spiral staircases descend to the underground chambers.

TYPE FIVE: WITH CROSS-SHAPED GROUND PLAN

Type five is constructed with a ground plan of a regular symmetrical cross, the well itself being situated in the middle, where the four arms meet. In this case, the demarcation between stepwell and pond (*kuṇḍa*) is not easy to make, therefore such a type of stepwell is occasionally referred to as a *kuṇḍa* in earlier literature. The one major example of this type found in Gujarat and Saurashtra is the Chaumukhi stepwell in

the village of Chobari. Its name itself indicates its structure which has four entrances (chau-mukhi in Gujarati corresponding to *chatur-mukhi-vāpi* in Sanskrit). In Sanskrit classification, this type with four entrances is named *vijayā*. The descent to the water-level is by four attached lateral staircases, one on each arm. The water level in this case is quite high, hardly one storey underground.

Notes and References

1. The term 'stepwell' seems to appear for the first time in the monographs of the Archaeological Survey of India. Whereas J. Burgess in *Report of the Antiquities of Kathiawad and Kutch, being the Result of the Second Season's Operation of the Archaeological Survey of Western India, 1874–75* (rpt. Varanasi, 1971), still confines himself to the use of the local term *wāv*, J. Burgess and H. Cousens in *The Architectural Antiquities of Northern Gujarat (more especially of the Districts included in the Baroda State), Archaeological Survey of Western India*, vol. XI (London, 1903, rpt. Delhi, 1975) introduce the term 'stepwell' while describing Rani Wav. Earlier writers like J.W. Watson, *Gazetteer of the Bombay Presidency, Vol. VIII, Kathiawad* (Bombay, 1884) and J. Tod, *Travels in Western India* (London, 1839, rpt. Delhi, 1971) use the local term *wāv* or *bāvdi* (resp. *baori*) and describe the monuments as 'village wells' resp. 'reservoirs and abodes in the hot season'.
2. P. Brown, *Indian Architecture, Vol. I, Buddhist and Hindu Periods*, 6th edn (Bombay, 1971), p. 123.
3. K. Fischer, *Schöpfungen indischer Kunst, von den frühesten Bauten und Bildern bis zum mittelalterlichen Templee*, 2nd edn (Cologne, 1961), p. 216.
4. Tod, *Travels in Western India*, and MacMurdo, *Journal of a Route Through the Peninsula of Gujarat* used the terms *bauri* resp. *bowrie*.
5. In Rajasthan the term *bāuli* is in use.
6. M.R. Majumdar, *History and Cultural Chronology of Gujarat* (Baroda, 1960), p. 30.
7. Capt. Watson's observation in *Gazetteer of the Bombay Presidency*, p. 68: 'During the months of April and May, many of these ponds become dry, and supplies have to be drawn from wells. . . .'
8. *Viśvakarma Vastushastram*, ed. K.V. Sastri, Tanjore Sarasvati Mahal Series, no. 85 (Tanjore, 1958), vol. 1, chap. 33.
9. R.P. Masani, *Folklore of Wells, Being a Study of Water-Worship in East and West* (Bombay, 1918), pp. 6–8.
10. Tod, *Travels in Western India*, p. 133.
11. M.S. Commissariat, *A History of Gujarat, including a Survey of its Chief Architectural Monuments and Inscriptions*, 2 vols (Bombay, 1938), vol. 1, pp. 123–4.
12. A.L. Basham, *The Wonder That Was India*, 2nd edn (London, 1967), p. 226.
13. S. Ghosh, 'Fresh Light on the Peninsula of Gujarat in the Early Nineteenth Century', *Journal of the American Oriental Society*, vol. 94, no. 4 (1976), p. 572.
14. Ibid.
15. Tod, *Travels in Western India*, p. 133.
16. Majumdar, *Historical and Cultural Chronology*, p. 23.
17. Ibid.
18. Entry in Pattavali of Anchalagaccha in *Jaina Tirtha Sarvasamgraha*, ed. Seth Anandji Kalyanji (Ahmedabad, 1953), vol. 1, under bhoral saying that Shreshthi Minya Shah built a Jaina temple having 144 pillars and seventy-two *devakulikas* in VS.1302 and made the installation ceremony, there itself a stepwell was built along with it.
19. Cf. J. Kirste, 'Inscription from Northern Gujarat, no. XV, Roho Stepwell Inscription', *Epigraphia Indica*, vol. 2 (Calcutta, 1894, rpt. 1970), pp. 24–32, and also a reference in M. Virji, *Ancient History of Saurashtra* (Bombay, 1962), p. 167, saying that a Śiva temple was built along with a stepwell in the town of Valabhi.
20. Cf. K. Fischer, *Schöpfungen indischer Kunst*, p. 216: 'Die einzelnen Gebäudeteile sind mit Pilastern und mit Nischen voller Götterbilder wie kleine Tempelchen verziert'.
21. S. Kramrisch, *The Hindu Temple*, 2 vols (Calcutta, 1946, rpt. Delhi, 1977), vol. 1, p. 5, quoting *Vishnudharmottara Purāṇa*, vol. 3, chap. XLIII, pp. 25–31.
22. Ibid., quoting *Tantrasamuccaya*, I.1.28.
23. Ibid., p. 6, quoting *Vaikhanasagama*, chap. XXXI.
24. A.K. Forbes, *Ras Mala* (London, 1978, rpt. Delhi, 1973), p. 546.
25. *Ṛgveda*, V.53.7, where rivers, crossing the atmosphere, are compared to cows as well as mares; cf. Also *Ṛgveda*, I.32.2; I.61.10; I.130.5.
26. Ibid., VII, 23.4
27. Ibid., I.155.4.
28. According to the *Parāśkara-grhya-sūtra*, quoted in P.V. Kane, *History of Dharmasastra*, 5 vols (Poona, 1930–62), vol. 2, part 2, p. 891.
29. *Ṛgveda*, V.32.2 and VI.57.8.
30. Ibid., VII.1.103.
31. Ibid., I.23.22 and X. 9.8.
32. A.B. Keith, *The Religion and Philosophy of the Vedas and Upanishads* (Cambridge, Mass., 1925), p. 141.
33. Cf. Masani, *Folklore of Wells*, pp. 66, 86.
34. R.E. Enthoven, *Folklore Notes, Vol. 1, Gujarat* (Bombay, 1914), p. 42.
35. Kane, *History of Dharmasastra*, vol. 2, part 2, p. 889, and Forbes, *Ras Mala*, p. 198.
36. Kane, *History of Dharmasastra*, quoting *Vishnudharmottara Purana*, chap. 91. 1–2.
37. Ibid., p. 890, quoting *Bana Kadambari*, V.44.
38. Watson, *Gazetteer*, p. 415, under Dhandhusar.
39. The full text is given in Jutta Jain-Neubauer, *The Stepwells of Gujarat in Art Historical Perspective* (New Delhi, 1981), appendix 1, p. 77.

40. Enthoven, *Folklore Notes*, p. 41.
41. Ibid., p. 147.
42. Ibid., p. 86.
43. *Aparājitapṛcchā* of Bhuvanadeva, ed. Popatbhai A. Mankad, Gaekwad Oriental Series, no. CXV (Baroda, 1950), chap. 145, vv.25–9.
44. R.K. Trivedi, 'Fairs and Festivals' (*Census of India, 1961*, vol. V, Gujarat, Part VII B (Delhi, 1965), p. 275.
45. Watson, *Gazetteer*, p. 525, and Masani, *Folklore of Wells*, p. 67.
46. Information in a letter to the author from Shri Manibhai P. Vora, Porbandar, 1 January 1978.
47. H. Trivedi, 'The Mers of Saurashtra: An Exposition of Their Social Structure' (Baroda, 1961), p. 85
48. R.E. Enthoven, *The Tribes and Castes of Bombay*, 3 vols (Bombay, 1922), vol. 2, p. 151, under *kanbi*.
49. H.R. Majumdar, 'Earliest Devimahatmya Miniatures with Special Reference to Sakti Worship in Gujarat' *JISOA*, 1938, p. 118, and M.P. Majumdar, *Historical and Cultural Chronology*, p. 45, mentioning that 'female forms were constructed in plenty in the Yavana country', quoting Bhasa.
50. Trivedi, *Fairs and Festivals*, p. 115.
51. Commissariat, *A History of Gujarat*, vol. 2, p. 25.
52. J. Burgess, *The Muhammedan Architecture of Ahmedabad, Part II, with Muslim and Hindu Remains in the Vicinity*, Archaeological Survey of Western India, vol. 8 (London, 1905).
53. Cf. Jain, *The Stepwells of Gujarat*, Appendix 2, p. 78.
54. Watson, *Gazetteer*, p. 689.
55. M.A. Dhaky, 'The Chronology of the Solanki Temples of Gujarat', *Journal of the Madhya Pradesh Itihasa Parishad*, vol. 3 (1961), p. 28.
56. 'Stone Inscriptions of a vapi at Sadadi', in *A Collection of Prakrit and Sanskrit Inscriptions*, pp. 143–4.
57. J.N. Banerjea, *The Development of Hindu Iconography* (Calcutta, 1956), p. 495.
58. Ibid., pp. 171–2.
59. Keith, *Religion and Philosophy*, p. 141.
60. *Hiranya Kesi Grhya Sutra*, II.4.5, quoted in Keith, ibid., p. 142
61. Masani, *Folklore of Wells*, p. 109.
62. Forbes, *Ras Mala*.
63. D.D. Kosambi, *The Culture and Civilisation of Ancient India in Historical Outline* (Delhi, 1970, rpt. 1972), p. 102.
64. W.J. Wilkins, *Hindu Mythology (Vedic and Purānic)* (rpt. Delhi, 1972), pp. 34–5.
65. François Bernier, *Travels in the Mughal Empire, AD 1656–68*, 3rd edn (New Delhi, 1972), p. 309.
66. Commissariat, *A History of Gujarat*, vol. 2, p. 53.

67. *Sankhyayana grhya sūtra*, vol. 2, quoted in Kane, *History of Dharmasastra*, p. 890.
68. *Parāskara-grhya-sūtra*, quoted in ibid., p. 891.
69. Mainly vv.6–16.
70. *Apararka, Hemadri* (Deanakhanda), *Danakriya-kaumudi, Jalāśayotsargatattva* of Raghunandana, quoted in Kane, *History of Dharmasastra*, vol. 2, part 2, p. 892.
71. Kane, ibid., p. 892.
72. M. Monier-Williams, *Sanskrit-English Dictionary*, s.v. *vāpī*, p. 941.
73. *Śabdakalpadruma*, in ibid.
74. *Amarakośa*, with commentary of Maheśvara; ed. V. Thalakikar (Bombay, 1886), p. 61, stanzas 26–8, and commentary to them. It gives numerous synonyms for the different kinds of water monuments. The line concerned with *vāpī* runs as follows: '. . . pond, pool, reservoir, stepwell and tank'. The commentary remarks: 'The tank (*dirghika*) that has two *dirghi* (?) is called stepwell (*vāpikā*) with down-leading passage (*avarohaṇa*).'
75. *Jalāśayotsargatattva* of Raghunandana, Jivananda edn, quoted in Kane, *History of Dharmasastra*, vol. 2, part 2, p. 891.
76. Monier-Williams, *Sanskrit-English Dictionary*, s.v. *vāpī*, p. 941.
77. See 'Stone Inscription of Sodhaldi Vao in Māngrol dated s. 1202', mentioning *Deguyavavi*; 'Stone Inscription in Lakshmi Narayana Temple at Mahuva, under Bhavnagar', mentioning an excellent *vāv* filled with fresh water' (v.4); and 'Stone Inscription, Vala, Kathiawad, dated s. 1828', mentioning that a *vāv* was built, all in *A Collection of Prakrit and Sanskrit Inscriptions*; and cf. The inscription of Nāgā Bāvā stepwell in Dhrāngadhrā of the early 16th century, ref., B.I.b (4).
78. K. Bruhn, *The Jina Images of Deogarh* (Leiden, 1969), p. 29.
79. 'Good Archaeological Finds', in *The Times of India*, 4 July 1977.
80. G.V. Acharya, *Historical Inscriptions of Gujarat* (in Gujarati), 3 vols, Shree Forbes Gujarati Sabha Series, no. 15 (Bombay, 1933–5), part I, pp. 12–13.
81. E. Hultzsch (ed.), *Corpus Inscriptionum Indicarum*, vol. I, Inscription of Asoka, p. 130; Seventh Pillar Edict: . . . B. Round the Pillar (p. 135) (s) 'And (at intervals) of eight *kos* wells were caused to be dug by me, and flights of steps (for descending into the water)' were caused to be built. The footnote says: 'Buhler read *nimsidhiya* which he rendered by "rest-house" connecting it with *nishidhiya* (from Sanskrit *nishidat*) in the Nagarjuni Hill Cave inscription of Kharavela', L. 15, Lüders (SPAW, 1914, p. 852) compares with it the Ardhamagadhi *seḍhi* = Sanskrit *ślishti*. As *seḍhi* is synonymous with Sanskrit *śreṇi*, he attributes to *nimsiḍhiya* the sense of Sanskrit *niśrayaṇi*, 'a ladder, a flight of steps'. This meaning would fit the text admirably, but the actual reading of the pillar is *nimsi(ḍha)ya* which would correspond to Sanskrit *niślishṭaka*. For the change of *śl* to *nis* see Pischels, *Grammatik*, Fascicle 1-4, and for *ḍh* = original *sht*, cf. *aḍha* = *ashṭa* at the beginning of section S.
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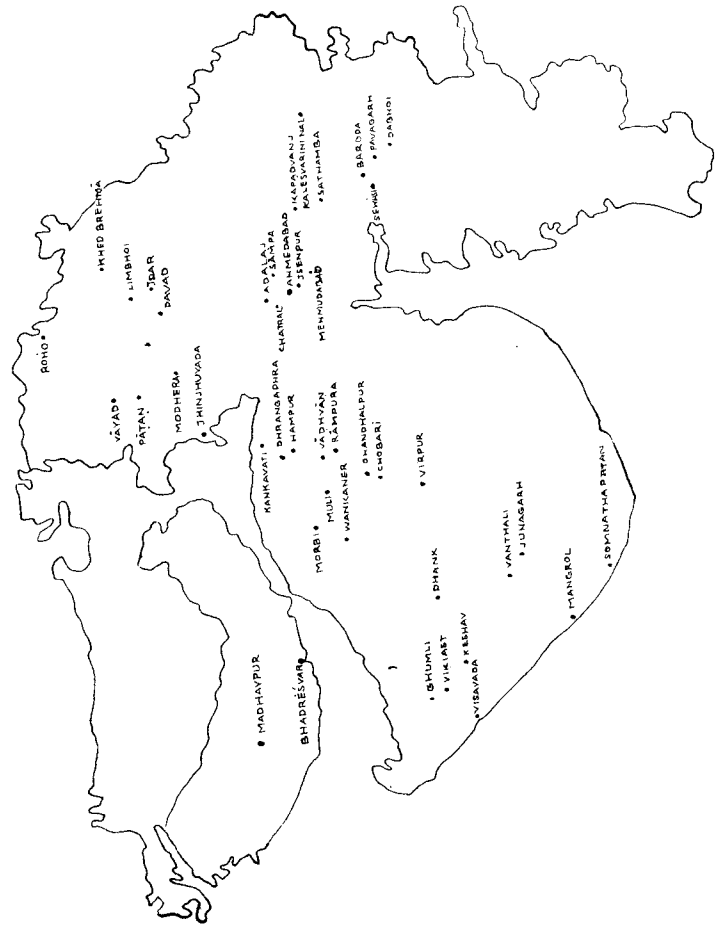


Fig. 1. Map of Gujarat showing location of stepwells.

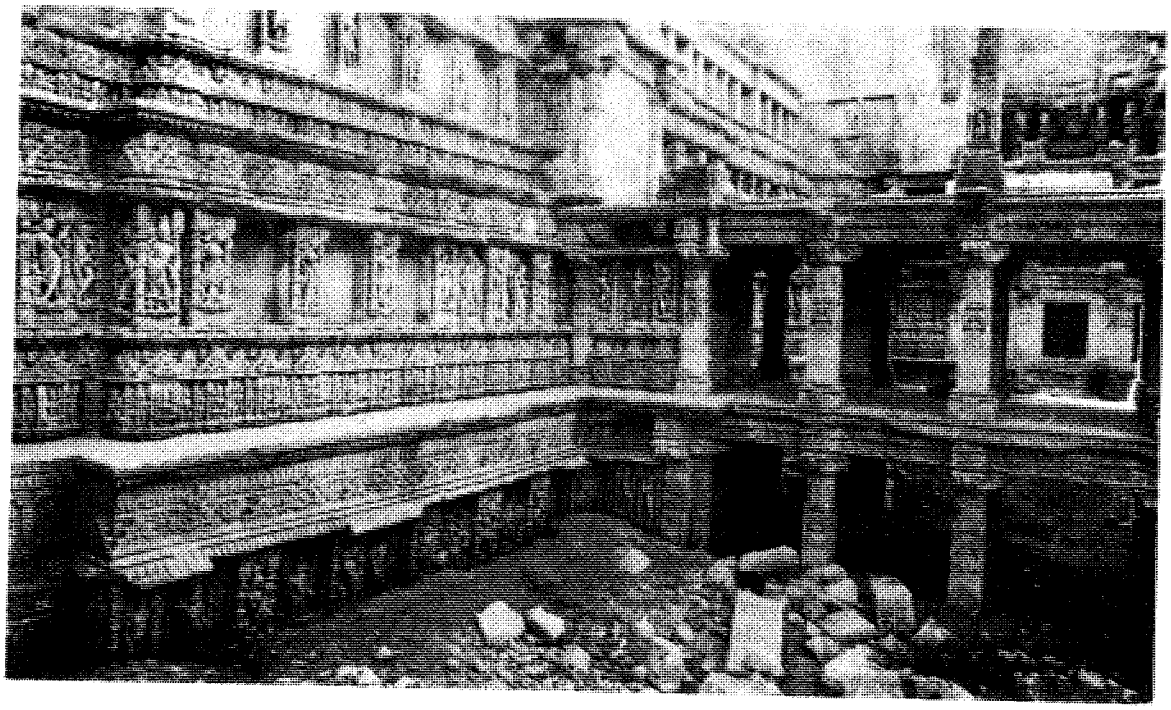


Fig. 2. Rani Stepwell, Pāṭan, North Gujarat, 11th century, view into the stepped corridor with sculptures along the side walls. Photo: J. Jain-Neubauer



Fig. 3. Rani Stepwell, view into backwall of the well with sculptures set in rows all around. The central figure is a sculpture of Viṣnu Śeṣaśāyin. Photo: J. Jain-Neubauer



Fig. 4. Ruda Stepwell, Adālaj, near Ahmedabad, 1499. Sculpture representing the Great Goddess in the form of her vehicle, the lion, with her attribute, the trident. Photo: J. Jain-Neubauer

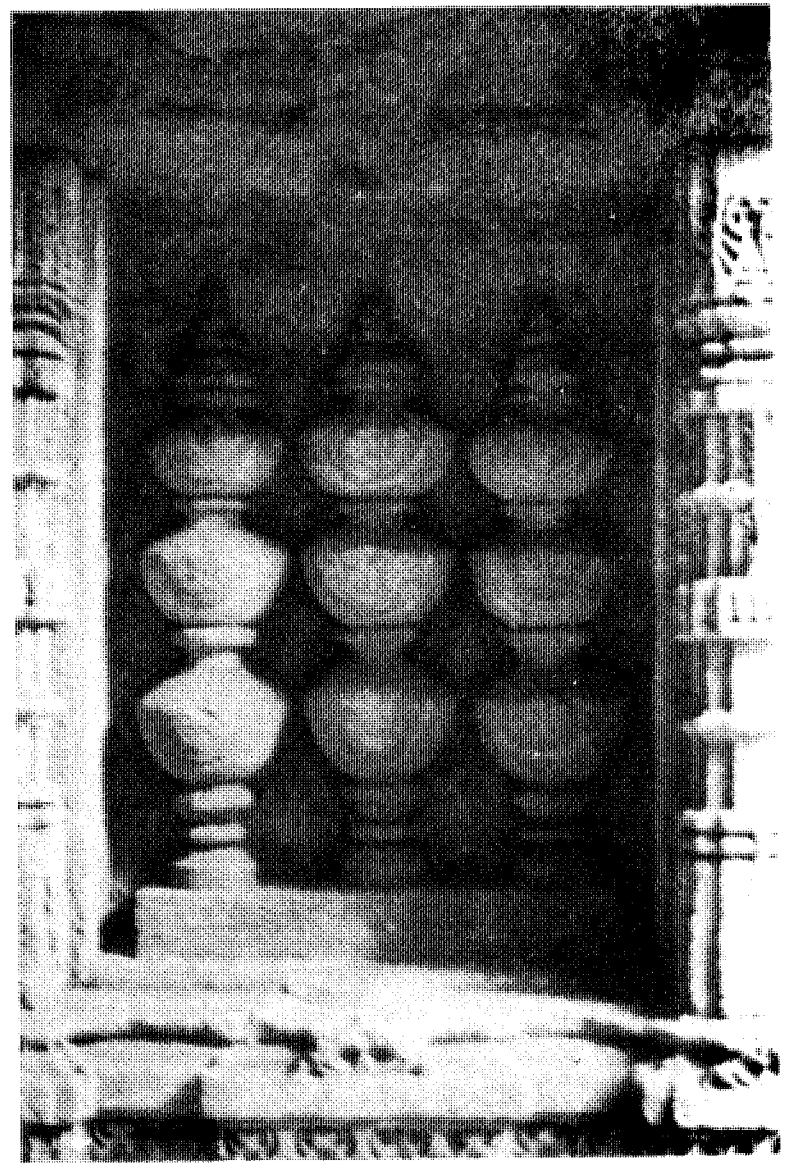


Fig. 5. Ruda Stepwell, Adālaj, near Ahmedabad, 1499, sculpture of nine pots, symbol of the Great Goddess in her aspect as 'navadurga'

Photo: J. Jain-Neubauer

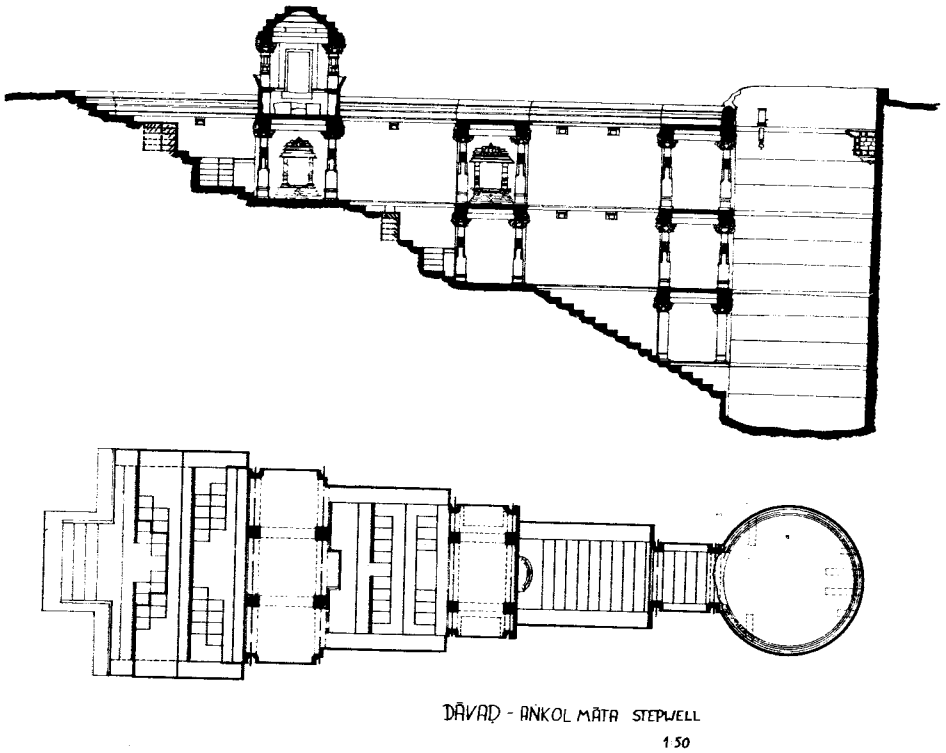


Fig. 6. Dāvad-Aṅkol Mātā Stepwell, section and ground plain.

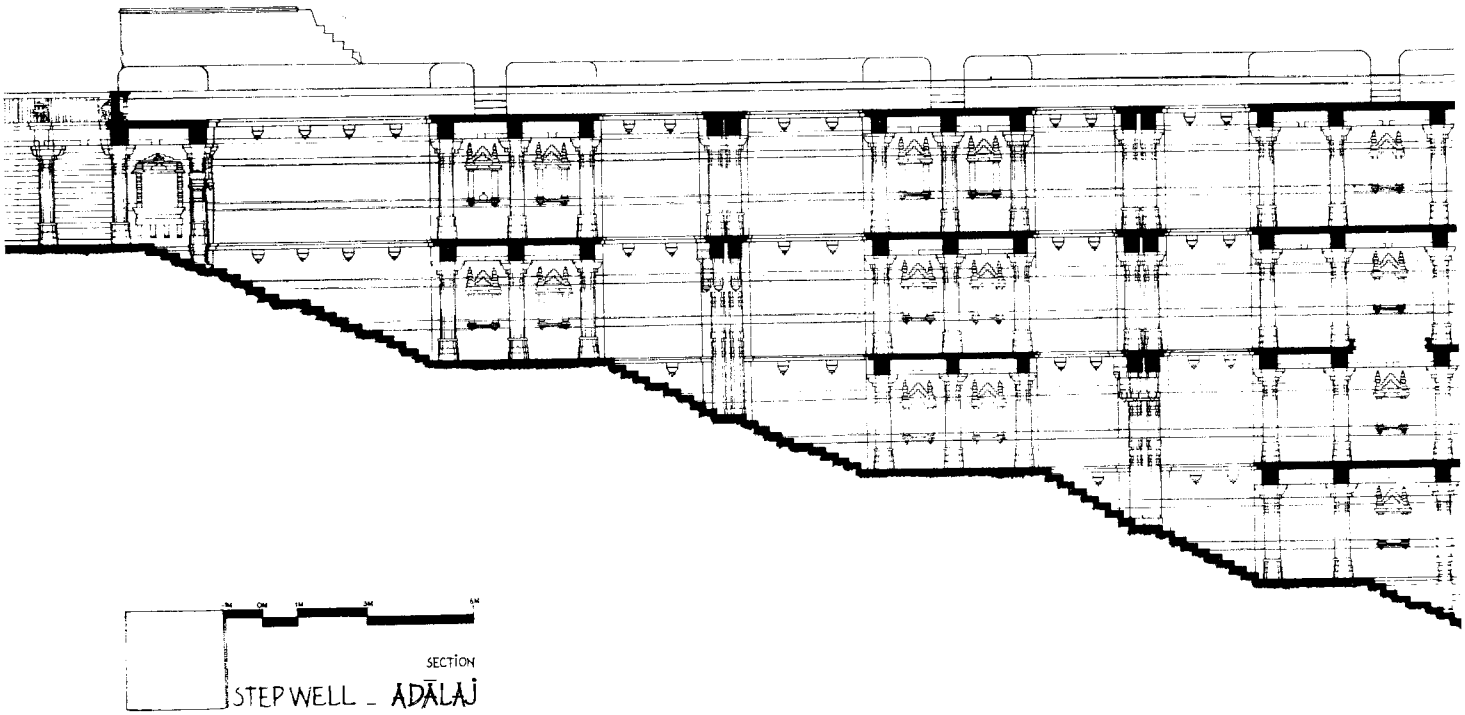


Fig. 7. Adālaj Stepwell, section.

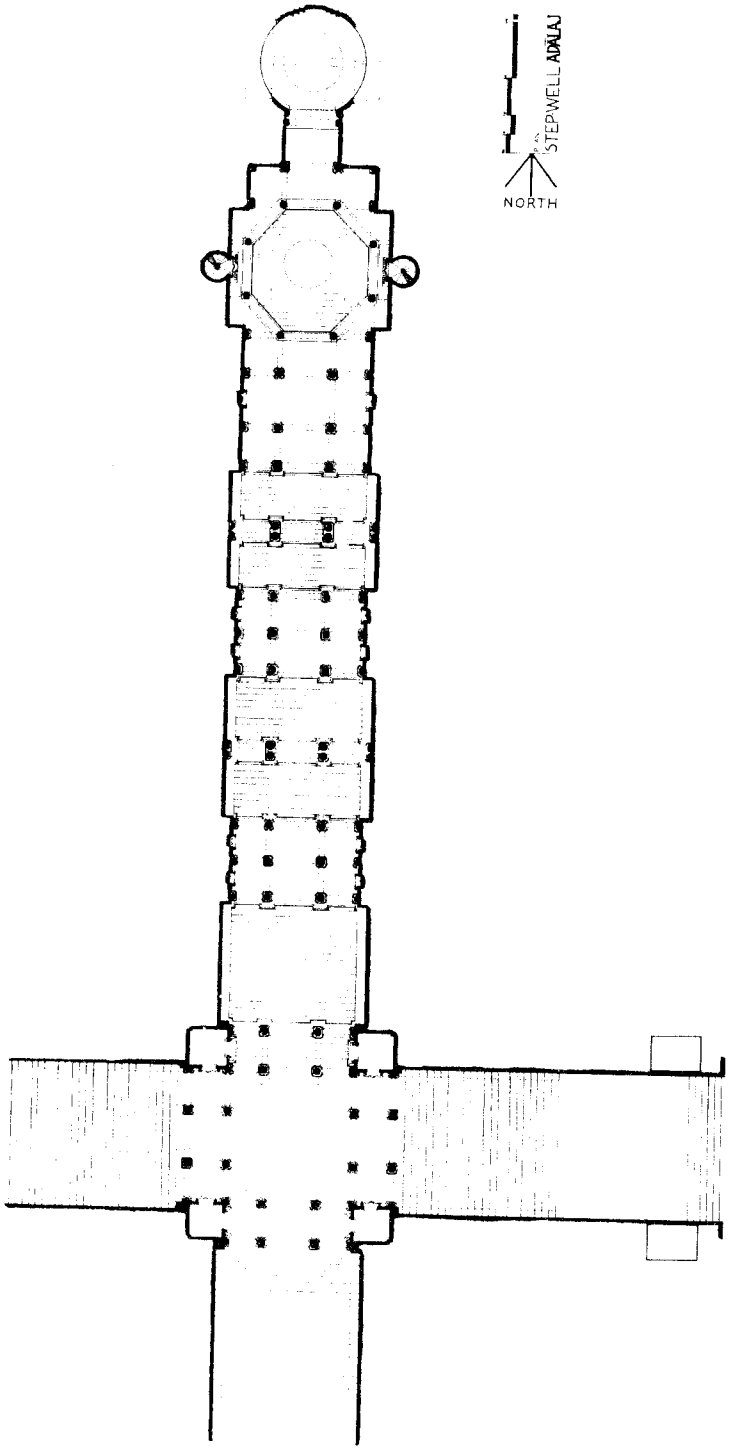


Fig. 8. Adālaj Stepwell, ground plan.

CHAPTER III.2

Four Mughal Caravanserais Built during the Reigns of Jahāngīr and Shāh Jahān*

WAYNE E. BEGLEY



Of the major structural types of Indian Islamic architecture, the caravanserai has perhaps been the most neglected by modern scholars. This is an unfortunate omission, in view of the extremely important role that caravanserais once played in political, economic, and cultural life. We know that seventeenth-century European travellers in India were greatly impressed by the large, walled hostelries they found there in such numbers and so conveniently situated. The capital city at Agra boasted eighty or more serais, and along the major Mughal highways they were to be found at regular intervals, approximately every twenty miles and sometimes even closer. Today the serais in the cities have largely disappeared, victims of urban expansion. Similarly, most of the serais along the old Mughal highways also gradually fell into disuse with shifting travel routes and the advent of railroads in the nineteenth century, and are by now rather dilapidated. A few have been designated protected monuments by the government of India or state archaeology departments, but most have simply been swallowed up by encroaching villages and towns, with only an occasional gateway still standing as a reminder of the original spacious, walled enclosures. The names of numerous serais can be found in various district gazetteers and lists of antiquarian remains, but otherwise the literature on Mughal

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architecture has largely ignored these important and often still imposing monuments.[1]

Altogether more than twenty Mughal serais still stand along the old Mughal highway between Agra and Lahore, a distance of more than four hundred miles. Since many of these are on the verge of total collapse, there is an urgent need to document them all. As a first step in that direction, four large caravanserais in the Punjab, built during the reigns of Jahāngīr (r. 1014–37/1605–27) and Shāh Jahān (r. 1037–68/1628–58) will be described here: Serai Dorāha (Ludhiana district), Serai Nūr Maḥal and Serai Dakhnī (Jullundur district), and Serai Amānat Khān (Amritsar district). Only the first of them is on the modern Grand Trunk Road (recently redesignated Sher Shāh Sūrī Mārg by the government of India); the other three lie along the now little-used, original route which, after crossing the Sutlej River, turned directly west from the town of Phillaur.

These particular serais were chosen for detailed analysis both because as a group they are representative of the range of major serai types to be found along this route and because they illustrate well the complex methodological problems involved in tracing caravanserai history. Two of them bear inscriptions giving the dates of construction and the names of their builders. The other two are not inscribed and therefore had to be assigned approximate dates on the bases of their style and of inferences drawn from various Mughal literary sources. Since the four serais are all close to each other chronologically as well as geographically, they can be arranged into a fairly cohesive stylistic sequence that can provide a tentative model for future investigations.

Serai Nūr Maḥal

Although literary sources inform us that it was the Sūrī ruler Sher Shāh (r. 947–52/1540–5) who first ordered systematic planting of trees and the construction of public serais along the Agra–Lahore highway, most of the surviving structures appear to date no earlier than the end of the reign of the great Mughal emperor Akbar (r. 963–1014/1556–1605) or the beginning of the reign of his son and successor Jahāngīr (r. 1014–37/1605–27).[2] As we know from his memoirs, Jahāngīr promulgated an order at his accession calling for the construction of wells and serais at regular intervals on major roads throughout his kingdom.[3] Fourteen years later, in 1028/1619, he also ordered mileage towers, or *kōs minār*, to be set up along these roads at regular intervals of one *kos*, or about two miles.[4]

Perhaps the most magnificent serai built during Jahāngīr's reign was the one endowed by his queen, Nūr Jahān (985–1055/1577–1646), at a place now called Nūr Maḥal, a fairly sizeable town on the Phillaur–Sultanpur road about thirteen miles west of the Sutlej crossing. The west gateway of the serai is still in excellent condition; the east gateway and the original mosque inside the walled enclosure are much deteriorated. Of the four serais this is the only one that attracted any detailed scholarly attention in the nineteenth century: it was surveyed by Alexander Cunningham in 1878–9 and published in the Archaeological Survey of India reports.[5] According to Cunningham's measurements, the serai is 551 feet square, measured from the outside of its octagonal corner towers. Built into the arcaded enclosure wall were more than 124 chambers facing towards the vast and originally completely open courtyard. These rooms were available for a modest fee to travellers, although most caravans simply stayed in the courtyard itself. Estimates vary, but apparently two thousand or more travellers, together with their camels and horses, could camp inside the serai at a time.[6] In theory a traveller could camp inside the courtyard without fee; in practice the managers of some of these establishments occasionally assessed certain charges on their own authority—though a later inscription on the west gateway at the Serai Nūr Maḥal specifically forbids this practice.[7]

Serais were customarily built entirely of brick. The Serai Nūr Maḥal is apparently unique among serais in the Punjab in its use of red Sikri sandstone to face the exterior of its impressive west gateway. Since the quarries at Fatehpur Sikri were more than three hundred miles distant, considerable expense was no doubt involved in transporting the stone slabs. The gateway façade is topped by bold crenellations and divided into three major sections: the main arch, which is advanced forward from the enclosure wall, and the two triple-storeyed side bays, which return at a diagonal. Adjoining the spandrels of the main arch are two square-domed, projecting balconies supported on intricately carved brackets. The façade is subdivided into numerous panels, many of which are filled with animals and ornamental designs carved in low relief. The greatest number of these rather fanciful and anecdotal motifs is found at the top of the inner recessed arch, just above the entrance. This is also the location of the rectangular marble slab containing the serai's foundation inscription.

The text of this inscription consists of four rhymed couplets, which Cunningham[8] translated as follows:

> During the just rule of Jahāngīr Shāh, son of Akbar Shāh,
> Whose like neither Heaven nor Earth remembers,
> The Nūr Serai was founded in the district of Phillaur
> By command of the angel-like Nūr Jahān Begam.
> The date of its foundation the poet happily discovered:
> 'This serai was founded by Nūr Jahān Begam' (1028).
>
> The date of its completion wisdom found in the words: 'This serai was erected by Nūr Jahān Begam' (1030)

The dates of the two chronograms correspond respectively to AD 1618–19 and 1620–1. From certain references in Jahāngīr's memoirs, it is possible to date the serai even more precisely. Very likely, the order to erect the serai was given around Shawwal 1028 (October 1619) when the court was at Agra, for that was the very month that Jahāngīr issued the proclamation to construct the *kōs minār*s throughout the empire; it was therefore a likely time for Nūr Jahān to have hit upon the idea of endowing a serai. In fact, the whole scheme for improving the demarcation of the royal highways may have been hers, which she persuaded Jahāngīr to implement. In any event, the serai was undoubtedly complete by the close of 1620, since Jahāngīr records in his memoirs that the royal entourage stayed there for two days in Safar 1030 (January 1621).[9]

Why did Nūr Jahān decide to erect a serai at that particular place and at that particular time? It was certainly a long-standing Islamic custom in India as elsewhere to endow serais, wells, and other charitable constructions for the benefit of travellers. This pious practice is well corroborated by the testimony of numerous European travellers of the period, including the English clergyman Edward Terry, who was in India from 1616 to 1619—around the time Nūr Jahān ordered the Serai Nūr Maḥal to be built.[10] Not all European observers attributed such high-minded motives to the patrons of these particular serais, however, as we know from the rather pointed criticisms of the queen's character found in the writings of an agent of the Dutch East India Company, Francisco Pelsaert of Antwerp. Pelsaert reached India in 1620, while Nūr Jahān's serai was still under construction. In 1626, in his capacity as senior factor at Agra, he wrote the report which has come to be known as the *Remonstrantie*, in which he accuses the ambitious Nūr Jahān of having usurped royal power and wealth to the point that her approval was required before even Jahāngīr's own orders could be implemented.[11] Pelsaert seems to suggest that even the motives behind Nūr Jahān's charitable foundations were suspicious: 'Meanwhile she [Nūr Jahān] erects very expensive buildings in all directions—serais, or halting-places for travellers and merchants—intending thereby to establish an enduring reputation.'[12] Nūr Jahān endowed a great many monuments, so we cannot be certain that Pelsaert had the Serai Nūr Maḥal in mind, but evidence suggests he may have made at least one journey to Lahore between 1621 and 1626, and if he did, he probably would have passed through that part of the Punjab.

As for Nūr Jahān's choice of site, a local tradition has it that as a child she spent some time in that area, and, of course, her family's hereditary fief was in the Punjab.[13] Moreover, from 1616, when her title was changed from Nūr Maḥal ('Light of the Palace') to the more glorious sounding Nūr Jahān ('Light of the World'), her power and influence kept increasing steadily. Consequently, the architectural grandeur and extravagance of her serai should perhaps be viewed as expressions of her imperial aspirations rather than her piety. This interpretation also helps to explain why the west gateway bears such a striking resemblance, in both form and material, to the vast Buland Darwāza attached to the great mosque at Fatehpur Sikri. If Nūr Jahān's purpose was to symbolise her own imperial destiny, she could hardly have chosen a more effective vehicle than Akbar's magnificent gateway.[14]

Serai Dorāha

The Serai Nūr Maḥal is unusual among serais in the Punjab, both in design and in the use of imported stone. The remaining three serais are much more typical of the region, particularly in their gateway façades. Those façades are built entirely of brick, decorated here and there with inlaid colour tilework (*kāshī karī*)—a technique that is seldom found outside the Punjab, whose city of Lahore seems to have been the chief centre of its manufacture.[15]

The distinctive architectural features of this class of brick serais are clearly seen in the north gateway of the Serai Dorāha, one of the earliest in the series. As its name implies (*dorāha* means 'two roads'), the serai is situated at the intersection of two main routes.[16] Although undated and uninscribed, circumstantial evidence suggests that it dates to the early years of Jahāngīr's reign, perhaps to 1015–19/1606–11, at least a full decade before Serai Nūr Maḥal. The gateways of the two serais bear little resemblance to each other; their only major common feature is the

row of crenellated projections across the top cornice—a decorative element that disappeared around 1630. The Dorāha façade is rather simple in design. A large central arch is flanked on both sides by double storeyed bays with arched alcoves. Framing the façade at the corners are two dome-capped, octagonal brick towers, divided into five storeys by slightly recessed panels with arches. Between the towers, the façade is completely flat, with the exception of the recessed main arch and two overhangs above the lower arched alcoves in both side bays.

The most striking decorative feature of the Dorāha façade is the use of geometric patterns of inlaid colour tiles around the main arch and in the spandrels of the two upper arched alcoves. Because of these geometric patterns, the Serai Dorāha seems to be approximately contemporaneous with a tomb at Nakodar (about fifty miles to the west, the first halting place after Serai Nūr Maḥal), which is dated 1021/1612–13.[17] The entire Dorāha façade—octagonal towers as well as geometric tile patterns—is also extremely close in design to the gateway of a now densely occupied serai at Fatehpur (the first halt westward across the Beas River), which was apparently begun shortly after 1015/1606. According to the travel account of the Englishman William Finch, who journeyed through this area in early January of 1611, the Fatehpuri Serai had been built by Emperor Jahāngīr to commemorate his victory over his rebellious son Khusraw, which had occurred at that very place on 27 Dhu'l-Hijja 1014 (5 May 1606).[18] Since Finch also mentions stopping at Dorāha, the serai must have already have been built as well. On stylistic grounds alone, it is difficult to determine whether Dorāha is earlier or later than Fatehpur, but both were undoubtedly in existence by 1019/1610. During the reign of Shāh Jahān, the Serai Dorāha was apparently known as the serai of I'timād al-Dawla, who was the former prime minister of Jahāngīr and the father of the queen, Nūr Maḥal.[19] As this region formed part of I'timād al-Dawla's fief (*jāgīr*), he may have undertaken its construction shortly after Jahāngīr's accession in 1014/1605, when, as mentioned, the emperor commanded serais to be built throughout the realm.

Serai Dakhnī

When we turn to Serai Dakhnī, about five miles northwest of Nakodar, it is obvious that its façade is substantially later than that at Dorāha. There are no crenellations, and consequently the gateway looks less like a fortification. The octagonal towers at the corners are similar in their lower sections (both have recessed panels arranged in five storeys), but their superstructures are dramatically different. At Serai Dakhnī, each

tower has a widely flaring cornice supported by squinch-like arches. Instead of low domes, the towers at Serai Dakhnī are surmounted by domed *chattrī* pavilions raised on pillars. The frame around the central arch has been extended to surround the side bays as well; these are now three-storeyed, but the two upper, arched alcoves on both sides have been replaced by rectangular balconies, each with three arches supported on narrow pillars.

With the extending of the arch frame, the area decorated with tilework has also been increased, and the whole character of the inlaid tile designs radically altered. Instead of abstract geometric patterns, the tilework on the Serai Dakhnī consists of curvilinear plant forms describing a graceful arabesque; a far greater range of tile colours has been used as well.

Unfortunately, Serai Dakhnī has no inscriptions and must therefore be dated on stylistic grounds alone.[20] The arabesque tile designs bear a slight resemblance to the pietra-dura work on the famous tomb at Agra which Nūr Jahān built for her father I'timād al-Dawla, who died on 24 Rabi I 1031 (6 February 1622), just two weeks after the royal entourage had once again passed through Serai Nūr Maḥal on its way to Kangra.[21] According to its inscriptions, the tomb of I'timād al-Dawla at Agra was completed in 1037/1627, the last year of Jahāngīr's reign. Stylistically, however, the Serai Dakhnī arabesques appear to be significantly later than this date, and they much more closely resemble the extensive tile patterns on the impressive mosque of Wazīr Khān at Lahore, completed in 1044/1634–5.[22] For most of his life Wazīr Khān was one of the most trusted courtiers of Jahāngīr's son and successor, the emperor Shāh Jahān (r. 1037–68/1628–58); and consequently, he attained an extremely high rank in the Mughal nobility. In the last month of 1041 (June 1632), he was appointed governor of the Punjab, and the mosque in Lahore is just one of the many pious constructions he endowed in that region under his administration.[23]

The similarity of some of their architectural features (such as the towers with flaring cornices), as well as their inlaid tile patterns, suggests that the Wazīr Khān mosque and Serai Dakhnī are more or less contemporary. If that surmise is correct, then Wazīr Khān himself may have been the serai's patron, since maintaining accommodations along the royal highways would have been one of his responsibilities as governor of the province.[24] Serai Dakhnī may even be slightly earlier than Wazīr Khān's mosque, for the most probable time for him to have ordered its construction was 1042/1632–3, as he was on his way to take up his new assignment in Lahore. He may well have anticipated that Shah

Jahān would eventually take this very same route through the Punjab, and it was not long before the emperor did just that. In Shawwal 1043 (April 1634) Shāh Jahān arrived in Lahore to instruct Wazīr Khān to take charge of various palace constructions in the fort.[25] If Serai Dakhnī was completed by that trip, the emperor would certainly have halted there while on his way to Lahore.[26]

Serai Amānat Khān

The fourth serai, the Serai Amānat Khān, is fairly close in style to Serai Dakhnī, and, since it is dated 1050/1640–1, it furnishes another, much-needed fixed point in establishing the chronology of serais in the region. It also marks a kind of culmination of the stylistic development we have been tracing and is in many respects the most interesting piece of architecture of the entire series.

Unfortunately, this once magnificent monument has today fallen into a state of extreme disrepair and is in urgent need of conservation. Despite its historical importance and great artistic merit, it also passed almost completely unnoticed by scholars until about three years ago. Its neglect is undoubtedly a result of its present isolated location off the main highway that passes through Amritsar, the holy city of the Sikhs, which lies some twelve miles to the north. The serai is almost five hundred feet square, but its once-spacious courtyard is now crowded with village houses, many of which were built of bricks robbed from the serai's enclosure wall.

Serai Amānat Khān's most remarkable architectural features are its two enormous gateways on the east and west sides, through which the old Mughal highway to Lahore once passed. A comparison of these gateways with those at Serai Dakhnī reveals several interesting stylistic changes that had occurred in the few years' interval separating the two monuments. At Serai Amānat Khān, the central entrance arch is much wider and more subtly articulated, through the addition of a chamfered intrados leading the eye back into the shadows of the deeply recessed inner arch. The panels on the octagonal towers are varied in size and coordinated with the design of the adjoining side bays of the main façade. These side bays with their projecting balconies have been much refined, with a narrowness that effectively accentuates the vastness of the central arch. All these changes indicate the hand of a highly skilled and sophisticated architect, perhaps the same architect who had designed the Wazīr Khān mosque at Lahore some six years earlier.[27] In addition

to the architectural differences between Serai Dakhnī and Serai Amānat Khān, the tile designs at the latter serai also reveal greater variety and subtlety, particularly in the treatment of the delicate arabesque patterns in the spandrels. All these details clearly indicate that Serai Dakhnī must have preceded Serai Amānat Khān by a few years—thereby providing additional support for the tentative date assigned to it above.

Like Serai Nūr Maḥal, the Serai Amānat Khān also bears inscriptions giving the date of its construction and the name of its benefactor. These inscriptions constitute the monument's most prominent decorative feature since they entirely fill the two enormous panels framing the gateway arches. Boldly executed in blue and yellow glazed tiles, the inscriptions clearly reveal the hand of a master calligrapher. As it turns out, the calligrapher and the builder of the serai were one and the same man, the great calligrapher Amānat Khān, who also executed the calligraphy on the Tāj Maḥal. Since the text of the inscription on the west gateway is given in the first person, it appears that Amānat Khān was the author as well as the scribe. The first half of the inscription consists of an effusive panegyric to Shāh Jahān, but at the upper left corner of the framing panel the statement of Amānat Khān begins:

> I have founded this serai in this land for the comfort of God's creatures [and] having completed it on this date, the fourteenth year of the accession of His August Majesty [Shāh Jahān], corresponding to the Hijrī year one thousand and fifty [I wrote], this inscription with my own hand by way of a remembrance. . . .[28]

How and why did Amānat Khān come to endow his serai at this particular time and this particular place, about a day's march from Lahore?[29] First of all, we know that Amānat Khān had received his title from Shāh Jahān in 1041/1632, probably in connection with his appointment as calligrapher of the Tāj Maḥal.[30] As we know from the calligrapher's prominent signature and colophon inside the Tāj Maḥal, the inscriptions on the mausoleum itself were completed in 1048/1638–9, in the twelfth year of Shāh Jahān's reign—or just two years before Serai Amānat Khān was constructed. We also know that Amānat Khān's elder brother was Afzal Khān, Shāh Jahān's prime minister and one of the most powerful officials in the realm.[31] When Afzal Khān died in Lahore on 12 Ramadan 1048 (17 January 1639) at the age of seventy,[32] a few days later Amānat Khān and his two sons were received at court as an expression of the high esteem in which Shāh Jahān had held the deceased.[33] According to the contemporary literary work *Chahār Chaman*, composed

around 1657 by the Mughal court poet Chandrabhān, Amānat Khān was deeply grieved by his brother's death—so much so that, 'resigning service and giving up office and rank, he sought the nook of retirement and led an absolutely secluded life, and constructed an attractive serai at one march's journey from Lahore and founded a village there, where he is presently lying at rest [that is, buried]'.[34] It would be tempting to assume that the serai was intended as a kind of memorial to Amānat Khān's late brother, but in fact the lengthy inscriptions on both gateways do not mention him. While Afzal Khān had reached the high *mansab* rank of seven thousand when he died, his brother Amānat Khān attained only the rank of *hazārī*, or 'commander of one thousand'. Nevertheless, his stipend, and perhaps his inheritance from his brother, had provided him with sufficient wealth to endow one of the most magnificent serais built during the entire reign of Shāh Jahān.[35]

The mosque inside the serai was built at the same time and also bears calligraphy designed by Amānat Khān and dated 1050/1640–1. Since the *Chahār Chaman* informs us that Amānat Khān was buried at the site, it can only be in the small, ruined tomb lying about eight hundred feet due south of the serai's east gateway. Although uninscribed and on the verge of total collapse, the tomb is stylistically of the period. It may have been started during Amānat Khān's lifetime or constructed after his death by one of his two sons—probably by 'Āqil Khān, who ultimately rose to an even higher rank in the Mughal nobility than his father had.[36] The exact date of Amānat Khān death is unknown; the official history of Shāh Jahān's reign, the *Bādshāhnāma*, states only that he died in the eighteenth year of the reign; that is, sometime between Jumada II 1054 and Jumada I 1055 (August 1644 and July 1645).[37] The serai itself is mentioned in passing in the *Bādshāhnāma*, in connection with a halt Shāh Jahān made there on 1 Safar 1055 (29 March 1645) on his way from Agra to Lahore. One wonders whether that halt may have been prompted in part by the emperor's desire to pay his last respects to the great calligrapher and devoted servant of the state.[38]

The Serai Amānat Khān is also listed by various European travellers as one of the stations along the Agra–Lahore highway.[39] In the same year that the serai was completed the Portuguese friar Sebastien Manrique was making his way from Agra to Lahore, where he arrived on Sunday, 10 February 1641 (28 Shawwal 1050).[40] Although he describes the imperial garden and serai at Sirhind, Manrique unfortunately omits specific details about the places he halted after that. The journey between Sirhind and Lahore took thirteen days, as Manrique recounts:

> [We] traversed many towns and large villages situated along the very road itself, all well and plentifully supplied with provisions and good Caravanserais. Some of the latter are handsome and particularly well built, in which we could not find room to stop owing to the stream of passengers of all sorts and conditions, who were at that time following those roads, owing to the presence of the court at Lahore.[41]

Elsewhere, Manrique briefly characterised the motives of those who built serais in a passage that certainly seems applicable to the Serai Amānat Khān and indeed to all four serais discussed here. 'They are', he says, 'sometimes erected at the expense of neighbouring villages, sometimes at the cost of rich and powerful men, who erect them in order to keep their memory green or to satisfy their conscience, and large sums are left for such works which in their opinion are works of piety and acceptable to God.'[41]

Notes and References

1. This is an expanded version of a paper presented in the session on Islamic architecture at the thirty-third annual meeting of the Society of Architectural Historians in Madison, Wisconsin, in April 1980. All four of the serais described here were visited and photographed by me in December 1979 in the company of Dr Z.A. Desai, Director of Arabic and Persian Epigraphy of the Archaeological Survey of India, who has very kindly furnished translations of some of the inscriptions we encountered. Although reference works such as the *Imperial Gazetteer of India* and the various district gazetteers are useful for locating specific monuments, the historical data they contain are cursory at best, frequently unreliable. Aside from a few miscellaneous articles, the only fairly detailed study of some Indian serais is R.C. Kak, *Antiquities of Bhimbar and Rajauri*, Memoirs of the Archaeological Survey of India, no. 14 (Calcutta, 1923). The few surviving Persian sources were first surveyed by Jadunath Sarkar, *The India of Aurangzib . . . with Extracts from the Khulasatu-Tawarikh and the Chahar Gulshan* (Calcutta, 1901). For recent listings of serais located along major trade routes, see Abul Khair Muhammad Farooque, *Roads and Communication in Mughal India* (Delhi, 1977); and H.D. Verma, *Medieval Routes to India: Baghdad to Delhi* (Calcutta, 1978); cf. the important study by Jean Deloche, *Recherches sur les routes de l'Inde au temps des Mogols* (Paris, 1968).
2. *The Cambridge History of India* (rpt. ed., Delhi, 1971), vol. 4, *The Mughal Period*, p. 57; specific sources cited in Farooque, *Roads and Communications*, p. 11.
3. Jahāngīr, *Tuzuk-i-Jahāngīri, or Memoirs of Jahāngīr*, trans. and ed. A. Rogers and H. Beveridge, 2 vols (rpt. ed., Delhi, 1968), 1: 7–8.
4. Jahāngīr, *Tuzuk*, 2: 100; cf. Deloche, *Recherches*, pp. 35–7.

5. Alexander Cunningham, in *Archaeological Survey of India Reports* (hereafter *ASI Reports*), 14: 62–5; see also S. Narain, 'Serai Nūr Maḥal', *Journal of Punjab Historical Society*, 11 (1931): 29–34.
6. In 1632, Peter Mundy stayed outside Agra at a serai, also built by Nūr Maḥal, which he estimated could accommodate 500 horses and 2,000–3,000 people; see *The Travels of Peter Mundy*, 2 vols (London, 1914), 2: 78. The estimate of Niccolao Manucci in 1656 was 'from 800 to 1,000 persons, with their horses, camels and carriages'; see *Storia do Mogor, or Mogul India*, trans. William Irvine, 4 vols (rpt. ed., Calcutta, 1965), 1: 67.
7. Cunningham, *ASI Reports* 14: 63. Manucci claims that during the reign of Sher Shāh, everything, even food, had been provided free to the traveller (*Storia do Mogor*, 1: 115).
8. Cunningham, *ASI Reports* 14: 64–5. A similar inscription once existed on the now very damaged east gateway, but it was destroyed in the nineteenth century. A local resident had copied the text of this inscription before its disappearance, however, and gave the text to Cunningham, who published this translation of it:

   During the reign of Jahāngīr Bādshāh, Lord of the Universe,
   King of kings of this world and his time, the Shadow of God,
   The fame of whose goodness and justice overspread the earth
   Until it reached even the highest heavens above,
   His wife and trusted companion Nūr Jahān
   Commanded the erection of this serai wide as the heavens.
   When this fortunate building rose upon the face of the earth—
   May its walls last for ever and ever!—

   The date of its foundation wisdom found in the words: 'This serai was founded by Nūr Jahān Begum' (1028).
9. Jahāngīr, *Tuzuk*, 2: 192, where it is also mentioned that Nūr Jahān arranged a lavish feast for Jahāngīr on this occasion. Cunningham, *ASI Reports* 14: 63, points out that royal apartments had been built in the south wall of the serai.
10. See William Foster, ed., *Early Travels in India* (London, 1921), p. 325.
11. *Jahāngīr's India, The Remonstrantie of Francisco Pelsaert*, trans. W.H. Moreland and P. Geyl (rpt. ed., Delhi, 1972), p. 50.
12. Ibid.
13. See Bakhshish Singh Nijjar, *Panjab under the Great Mughals* (Bombay, 1968), p. 194; cf. Chandra Pant, *Nūr Jahān and Her Family* (Allahabad, 1978).
14. The resemblance is generic rather than specific, although certain motifs, such as the embossed *shamsa* medallions in the spandrels of the Serai Nūr Maḥal gateway, seem directly derivative. There are several precedents at Fatehpur Sikri for the projecting balconies with squared domes. For a recent study of Akbar's ceremonial capital, see S.A.A. Rizvi and V.J.A. Flynn, *Fathpur-Sikri* (Bombay, 1975); see also the critical review of that book by Z.A. Desai in *Islamic Culture* 52 (1978): 57–67. For the architectural symbolism of Fatehpur Sikri, see the excellent article by J.F. Richards, 'The Formulation of Imperial Authority under Akbar and Jahāngīr', in J.F. Richards, ed., *Kingship and Authority in South Asia* (Madison, 1978).

15. For a detailed introduction to Indian tilework, see J.P. Vogel, *Tile Mosaics of the Lahore Fort* (Calcutta, 1920); cf. R. Nath, *Colour Decoration in Mughal Architecture* (Bombay, 1970).
16. Verma, *Medieval Routes to India*, p. 61.
17. Cunningham, *ASI Reports*, 14: 58–62. According to its inscriptions, this handsome octagonal tomb was built for Muḥammad Mu'min Ḥusayn, whom Cunningham identifies as a famous musician of the period of Akbar. Adjacent to this tomb at Nakodar is another, also decorated with tilework and dated 1067/1656–7.
18. Foster, *Early Travels in India*, pp. 158–9. For Jahāngīr's account of Khusraw's rebellion, see Jahāngīr, *Tuzuk* 1: 51–69.
19. See the official history of Shāh Jahān's reign by 'Abd al-Ḥamid Lāhūrī, *Bādshāhnāma*, ed. Kabīr al-Din Ahmad and 'Abd al-Rahīm, 2 vols (Calcutta, 1867–8), 1b: 9, where it is mentioned that Shāh Jahān halted at this serai on 23 Ramadan 1043 (23 March 1634), while on his way to Lahore.
20. According to Vogel, *Tile Mosaics*, p. 9, Serai Dakhnī was built 'about AD 1640' by the Mughal noble 'Ali Mardan Khān (who became governor of the Punjab in 1049/1639), but no substantiation is offered for this opinion.
21. Jahāngīr, *Tuzuk*, 2: 220–3.
22. See M. Abdullah Chaghtai, *The Wazir Khān Mosque* (Lahore, 1975).
23. For Wazīr Khān's biography, see Shāh Nawāz Khān, *Ma'āthir al-Umarā'*, trans. H. Beveridge as *Maathiru-l-Umara*, 2 vols (Calcutta, 1911–12), 2: 981–3. See also the numerous references in Lāhūrī, *Bādshāhnāma*. Wazīr Khān held the post of governor of the Punjab for more than seven years, until the end of 1639, when he was removed from office for 'some improper actions' and subsequently reappointed as governor of Agra, a post he held until his death in 1051/1641.
24. The origin of the name Serai Dakhnī is uncertain, but it could mean 'southern serai'; if so it may refer to its position as the southernmost of the numerous constructions endowed by Wazir Khān in the Punjab during his tenure as governor.
25. Chaghtai, *The Wazir Khān Mosque*, p. 6; Lāhūrī, *Bādshāhnāma*, 1b: 13.
26. Incidentally, thanks to the capable efforts of the Archaeological Survey of India conservators, the Serai Dakhnī is one of the few well-preserved serais in the Punjab; it is, moreover, completely devoid of the encroaching village constructions that have choked most of the other caravanserais. Nijjar, *Panjab under the Great Mughals*, p. 199, mentions that the serai was used as a leper colony in the nineteenth century.
27. The identity of the architect of the Wazīr Khān mosque is unknown, though at least two different calligraphers have signed their names on the monument. Serai Amānat Khān has several architectural features in common with Wazir Khān's mosque, most notably the similar arrangement of recessed panels on the towers/minarets.
28. Translation of Dr Z.A. Desai, who intends to publish all of the Serai Amanat

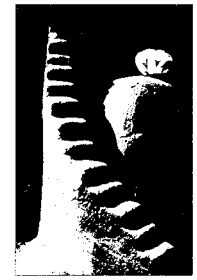
Khān inscriptions in a forthcoming article in *Epigraphica Indica, Arabic and Persian Supplement*, of which he is the editor.

29. This question and the chronology of Amānat Khān's life are discussed at some length in my recent article, 'Amanat Khān and the Calligraphy on the Tāj Maḥal', *Kunst des Orients* 12 (1978–9): 5–60, and therefore only a few points need to be summarised here. See also my article, 'The Myth of the Tāj Maḥal and a New Theory of Its Symbolic Meaning', *Art Bulletin*, 61 (1979): 7–73.
30. Lāhūrī, *Bādshāhnāma*, 1a: 429.
31. For Afzāl Khān's biography, see Shāh Nawāz Khān, *Maathiru-l-Umara*, 1: 148–53.
32. Lāhūrī, *Bādshāhnāma*, 2: 131.
33. Ibid., 2: 132–3.
34. I am grateful to Dr Z.A. Desai for calling this reference to my attention, which comes from the third section of Chandrabhān's work; see the recent critical edition by Muḥammad Rafiq, 'Chahār Chaman of Chandrabhān Brāhman Lāhūrī' (M.A. thesis, Punjab University, Lahore 1970), pp. 114–16. Since Chandrabhān's former patron was Afzal Khān, he must also have been acquainted with Amānat Khān. See F.M. Asiri, 'Chandra Bhan Brahman and His *Chahar Chaman*', *Visva-Bharati Annals* 4 (1951): 51–64; and Muhammad Abdul Farooqui, *Chandra Bhan Brahman, Life and Works* (Ahmadabad, 1967).
35. For an explanation of the *mansabdārī* system of Mughal nobility, see, among numerous works on this subject, U.N. Day, *The Mughal Government* (New Delhi, 1970). Amānat Khān's rank was not without prestige; of more than 850 nobles listed in various histories of Shāh Jahān's reign, 428 were below the rank of *hazārī*.
36. For 'Āqil Khān's biography, see Shāh Nawāz Khān, *Maathiru-l-Umara*, 1: 259–61. According to the biography of Amānat Khān contained in the *Mir'āt al-'Ālam*, the calligrapher himself built the garden which formerly surrounded his tomb; see Sajida S. Alavi, ed., *Mir'āt al-'Ālam . . . of Muhammad Bakhtāwar Khān*, 2 vols (Lahore, 1979), 2: 487.
37. Lāhūrī, *Bādshāhnāma*, 2: 737; but see *Maathiru-l-Umara*, 1: 260, where it is stated that Amānat Khān died in Shāh Jahān's sixteenth year, or Jumada II 1052 to Jumada I 1053 (September 1642 to August 1643).
38. Lāhūrī, *Bādshāhnāma*, 2: 413. The passage merely mentions that Shāh Jahān held audience in the serai; no reference is made to Amānat Khān's death.
39. For example, Jean-Baptiste Tavernier, in his *Travels in India*, trans. V. Ball, 2 vols (rpt. ed., New Delhi, 1977), 1: 77, where 'Menat-Kan' (Serai Amānat Khān) is listed as the first halt after Lahore and two halts before 'Sera-Dakan' (Serai Dakhnī).
40. *Travels of Fray Sebastien Manrique*, trans. C.E. Luard, 2 vols (London, 1927), 2: 184.
41. Ibid., p. 100.

CHAPTER III.3

The City as an Image of the King: Some Notes on the Town-planning of Mughal Capitals in the Sixteenth and Seventeenth Centuries*

ATTILIO PETRUCCIOLI



In his travels in Italy Goethe noted that '(Italians love) public festivals, the pomp of processions and pageants, spectacles, carnivals, masked balls and splendid public buildings.' A study of the urban scene, read as theatre, which, with reason, Goethe finds congenial to the Italian character, or, as an 'Essay on Order', may be a useful approach to the understanding not only of the pre-baroque city but of all the city-building of the period in Italy. In Florence, this theatrical potential was used by the Signoria as a direct expression of power. Some things are denied even to autocratic rulers; some concepts can be expressed only in the guise of metaphor or in the play of allusions and the reflection of illusions. Thus the city and the palace make up a theatre in which is played out a drama of ambiguity which celebrates (with the complicity of the Master, and the Servant/populace) a half-divine origin for the Prince, acquired in fact more prosaically with the profits of commerce.

Towards the end of the fifteenth century in Italy the piazza served as a stage around which gathered political and cultural institutions, and where religious processions, commercial life and political events all

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took place. From the beginning of the sixteenth century, with the development of theatrical techniques, the scene moved indoors to the palace of the Prince and parties, meetings, contests, dances, and mythological masques became the occasion for new figurative arrangements, abetted by the new optic and geometrical discoveries of the times. This was like a play within a play, which relied on real-looking but unreal scenery, at a court in which the relationships between courtiers were based on a false code of manners which nevertheless aped the truth.

At the end of the sixteenth century this tendency took, in Florence, its final theatrical form with the construction of such Florentine facilities as the Salone dei Cinquecento, adapted by Vasari between AD 1547 and 1569, the Teatro Mediceo degli Uffizi, arranged by Buontalenti in two different versions in AD 1585 and 1589, the courtyard of the Pitti Palace transformed by Buontalenti and Giulio Parigi into a jousting-field and a setting for sham sea-battles and other spectacles between AD 1579 and 1637, and the amphitheatre of the Boboli Gardens, blown up to the scale of the surrounding park. These undertakings were filled with classical reminiscences. In the theatres use was made of new town-planning principles such as grand axis, three-pronged street intersections and flies and backdrops in papier-mâché making up views of the ideal city. The sixteenth-century myth of the ideal city is best represented by three paintings in perspective, now in Urbino, Baltimore and Berlin ascribed to the school of Francesco di Giorgio, an ideal which assumed final concrete shape in the built experiments of Pienza, Urbino, and Ferrara.

In a process at once parallel and opposite, the use of stage-scenery and perspective created a sequence of architectural episodes in the city which revealed the intention of the Prince to govern the city with the power of imagination. In Florence the influence of the Medici moved out onto the city from the old palace in Via Larga with modest interventions, which were nevertheless designed to found a new city, recuperating the strong points of the mediaeval city such as the Baptistery and Piazza della Signoria, exorcising the old town centre and its problems, to conclude with the aerial passageway of Vasari which ends at the new Pitti Palace on the other side of the river Arno. The project was imbued with classical precedents: the passageway recalls the corridor of Emperor Caligula which ran like a bridge between the hills of the Campidoglio and Palatino, a heroic gesture repeated by Paul III with a bridge between Palazzo Venezia and the Campidoglio; and it presents many analogies with a contemporary screened gallery built by Akbar at Fatehpur Sikri for the movement of the ladies of the harem from the palace to the Hiran

Minar (hidden from prying eyes). Not by chance are the innovations processional, with ceremonial movement seen as a formal entry, a family feast or a religious ceremony which led on the one hand to an ostentatious show of power, and on the other suggested another kind of city, intellectual in spirit and altogether different from the physical city: the city of the Prince as opposed to the mediaeval Florence of the corporations.

The exaltation of the new princely city reached its peak in magnificent processions occasioned by state visits or events which celebrated the dynasty with its birthdays, the promises of its betrothals, and the apotheosis of its deaths. In the various state visits of Charles V to the principal Italian cities in the first half of the sixteenth century the real, the archaeological and the artificial city met together in an iconological programme of which the arch of triumph was the chief symbol. In AD 1565, with the wedding of Francesco de'Medici, the celebrations commemorated the pomp of the Medici, and signalled the exploits of the forbears of the future Grand Duchess of Tuscany, appropriating symbolically the entire city.[1]

If this see-saw between truth and illusion, and between complicity and rejection (with things most real when masked) was wanting in the great Eastern dynasties of the Mughals, the Safavids and the Ottomans, there is no doubt that the outward show of power of these sovereigns was accomplished by the use of theatrical methods. Mughal representations are partial in that the show is put on for the benefit of the actors, and the populace, the potential spectator/accomplice, is absent.

Apart from finding the elective affinities between two distant courts this approach promises to open up new insights into the study, still in its beginnings, of Mughal town-planning, where public spectacle—it does not seem to be the case to use the word 'stage'—demonstrated and celebrated the divinity of the emperor. Let us examine how two parallel forms of Mughal ritual, the royal audience and the procession, were modified by their setting, either the garden, the encampment, the palace or the city, and how the garden and the encampment, in the course of the sixteenth and seventeenth centuries, change meaning, form and function.

The Mughal garden, according to the Timurid tradition, coupled functions of 'contemplation' and of state ritual. The garden was a place for feasts and receptions, where it was fitting to celebrate the apotheosis of the King of Kings. The changing nature of the garden, with a ritual which became progressively more complicated and rigid, marked a cross-over from an idea of nature closed within the abstract scheme of

the *chaharbag* to an organic representation of the relation between the garden and the landscape itself.

An original feature of the court was its extraordinary mobility, dictated by the need to spread the royal image throughout the country with the purpose of controlling the political temper of the population and discouraging possible sources of rebellion. There were many occasions for moving the court in grand style: from military campaigns to hunting parties and pilgrimages, as well as seasonal movements towards milder climates. Akbar was accompanied on a simple hunting party by no less than 100 elephants, 500 camels, 400 wagons and 100 bearers, as well as approximately 1,000 *farrashi*, 100 water-carriers, 50 carpenters and at least 150 common workmen and 500 pioneers. When the king set out on a more important voyage he was accompanied by his harem and ministers and the numbers multiplied geometrically. If we are to believe Monserrate the *cortèo* of Akbar reached a length of at least 2.5 kilometres, a city on the move. It is clear that the coordination of the *cortèo* and its halts, with the organisation of the royal camp in the hands of the Mir Manzil, required the highest level of administrative ability. The area covered by the royal camp was variable: Bernier found that the camp of Aurangzeb was formed of a square, 300 paces on each side, while Abu'l Fazl gives a length of 1,540 *illahi gaz*, roughly, 1,230 metres, for the central part only. The latter describes in detail the hierarchical arrangement of the enclosures,[2] which included a large unpaved area for stores, the bivouac of the imperial guard, the arsenal and subsequently the Naubat Khana, the Diwan-i 'Amm or place of public audience, the Khwabgah, and the Diwan-i Khass, respectively the residence of the emperor and the place of private audiences, as well as the *zenana*.

The garden and the encampment were the only forms available to the Mughals when in the second half of the sixteenth century the redesign—in the semblance of the royal image—of Indian cities was undertaken with the intention of eliminating direct contrasts between the cities and their citadels. The description of a camp given by Abu'l Fazl demonstrates the existence of a close functional relationship between the disposition of the camp and that of the palace, in a blend of nomadic and sedentary culture. The world of the tent persists, however, in the forms of built architecture, the juxtaposition of courts and buildings, in the pavilions, the skyline of the roofs, the mouldings and other decorative details, to the extent of justifying for the opulent palaces of the Mughals the definition of 'a camp in stone'.[3] Studying the plans of Mughal cities (which like palimpsests contain frequent erasures and rewritings), it is possible

to reconstruct their programme for the realisation of the ideal city. Agra, the 'Dar-ul Khilafat' of Akbar, which is reconstructable from literary sources, does not differ greatly from its predecessors (such as Gwalior), basing itself on an anti-urban concept which sets up the palace/fortress of the Rajah against the city/ghetto of the populace. At Agra the Red Fort, constructed on a high point with imposing walls and turretted bastions, is conceived above all as a siege-proof strong point. Next to the fortress is the royal square, the Maidan-i Shah, an open area for official uses such as reviewing the troops and the corvée of the nobles chosen in rotation for royal guard duty, with, along the banks of the Yamuna, open spaces for elephant fights and other spectacles. In this area in the early morning the dignitaries were admitted to the luminous presence of the king following a ceremony having its origin in the Hindu Jharoka Darshan. The quarters of the nobles were sited in the shadow of the royal palace on a thin strip of land similar to a garden city along the river towards the north.

At Fatehpur Sikri where—a unique case in the history of town-planning—it is possible to study a city frozen in time, a process of transformation and rebuilding based on changes in ceremonial can be observed. However, since it is caught in a moment of transition, the city presents a certain number of contradictions. The palace of Akbar is an enigma wrapped up in a mystery. The solution does not lie merely in a functional key. In fact, the sequence of enclosures of the Diwan-i 'Amm, the Diwan-i Khass, from the Khwabgah to the so-called Place of Jodhbai, made up the setting for a theatrical scheme of arrangement, 'an Aula Regis as a simulacrum of the Cosmos', where a *libretto* of performances which take place simultaneously in space and time, like a fresco-sequence, reiterates the divine origin of the god-like prince. The Anup Talao fountain and the Diwan-i Khass, which embody complex symbols, make up at the same time an allegory of spiritual pilgrimage on the part of the Sufi Akbar from the terrestrial world towards Universal and Celestial Harmony, at the centre of which is placed Akbar in the role of Cosmocrat. A subtle play of equivocation between Cult of the Throne and Cult of the Divine spreads out from this strange building at Fatehpur Sikri across the entire Mughal domain.

Today the Diwan-i 'Amm is as empty as an abandoned theatre; the royal baldachinoed throne is gone, as well as the curtains and red hangings suspended from the *talar*, the draperies, the *jali* on the terrace behind which the women were concealed, the carpets on the floors; but above all, the actors are missing. This was the setting for the daily

darbar, a sacred representation of the divine origin of the king, in which drama alternating with comedy was played out with clearly theatrical intent and the role and position of the participants were precisely defined *vis-à-vis* the throne.

Along the banks of the lake, coming from the gate of Agra, the royal procession entered the palace through the monumental entrance of the Hathi Pol, zig-zagging up through the complex to arrive at the enclosure of the darbar at the very top. Here, on the other side, an 800-metre long street, flanked by shops and interrupted at the half-way point by a *charsuq*, led directly from the entrance-gate of Agra to the Diwan-i 'Amm. There are here two opposing principles of town-planning; symmetrical perspective and the exaggerated width of the street clearly demonstrate the function of the latter as a processional way.[4] These differing and contradictory tendencies are explained by the lapse of time required to develop a new physical context for the new ceremonial based on the person of the king in movement.

It is less important to establish whether there is a direct link here with Safavid culture, or with analogous European experience (Via Giulia, for example, at Rome was opened up before AD 1509 as a ceremonial highway in a new concept of urban renewal). The town plan of the city of Hyderabad in the Deccan, founded by Sultan Quli Qutb Shah in AD 1591 on the banks of the river Musi, has a cross-shaped plan with two porticoed bazaars at whose intersection is placed a colossal building, the Charminar. The architect was a Persian,[5] whose tomb is venerated as if he were a saint by the Shiite community. As a response to an ideological programme which prescribed the creation of a replica of the Paradise of the *Koran*, the archetypical form of the Persian garden (a vegetal metaphor for Heaven) appeared the most adequate solution. The porticoed streets which housed 1,400 shops were clearly intended as arteries of commercial growth; but examining the plan in more detail, four arches are seen to the north of the Charminar which determine a second intersection, the *Charkaman*, at whose centre was placed a fountain called the Charsu-ka-Hauz. At the time of the Qutb Shahs the royal quarters lay immediately to the west, closed off by a curtain which hung from the western arch, called Daulat Khana-i-'Ali. On the opposite side, beyond the arch of Naqqar Khan-i Shah lay the *maidan* and the military cantonments. For the first time, in this case, a solemn processional way superimposes itself on the commercial heart of a city. A serious comparison, both in real and functional dimensions, with the processional way built at Vijayanagar for the parade of the monumental chariot (*ratha*) during religious festivals, could open up interesting analogies.

When Shah Jahan decided to build a new capital to the north of Din panah at Delhi in AD 1638, the experience of Agra was recent, where the royal areas around the fort had been encroached on by an accelerated growth of the city itself. To adapt the existing situation to the new requirements of processional axis would have required immense, and clearly unpopular, demolition operations.

Shahjahanabad, laid out on a flat and open terrain to the west of the Yamuna, in the form of a quadrant of a circle based on the two (almost) orthogonal axes of Faiz Bazaar and Chandni Chowk demonstrated with compelling symbolism to all the subjects of the realm that the throne was placed at the centre of the city, of the Empire, and of the Universe. The Palace was the Theatre of the World. The two porticoed avenues project the movement of the King of Kings into the heart of the Mughal city where on the occasion of the principal religious and civil feasts (particularly the New Year or the feast of *Nauruz*, and the emperor's birthday), the population, amassed under the porticoes or on the terraces of the houses, participated in a baroque and theatrical ceremony: the slow progression of the Divine 'Presence' of the ruler which dominated the entire procession. Analogies with the six axes of the plan of Sixtus V for Rome (AD 1585–90) finish here: at Rome, a pre-established visual continuitity links the two cardinal points of the obelisks, extracted from the ruins of the Roman imperial city; at Delhi the two bazaars are conceived of as the sum of individual architectural parts. This can be compared with the spatial arrangement in Mughal miniatures, where the simultaneous use of various points of view and vanishing points breaks up the unities of action and space, as in a futurist painting.

Little remains of the original bazaars, destroyed or overgrown by later squalid structures, but a clear idea may be obtained from the plan of Jaipur (AD 1725) which is a direct copy of that of Shahjahanabad. The two axes multiply here into a modular grid (with a possible ideological allusion to the schemes of certain Sanskrit literary models) punctuated by squares. The Rajah and his court, emerging from the Tripolia Gate, descended into the field in paramilitary formation. This function of theatrical-layout-become-city not only determined the dimension of the streets, but revolutionised building types, amongst which the typical patrician palace, sited on a deep lot, with access from the bazaar at street level, made up of a linear sequence of courts; and residences of the merchant class, where the ground floor became a warehouse and the first floor developed around a central court, served by a stair and a ramp. The palace was characterised by a perforated façade, a series of terraces and a skyline marked by numerous pavilions; the merchant's house, by a

set back at the first floor, which created a terrace for the full length of the façade, while numerous *chhattris* served as a kind of multi-level grandstand for the observation of the street theatre.

Elephants, with their size and height, became the dominating element in the processions. It is probable that the viewing point around which scenic perspective was constructed was not a human measure of 160 cm. But a dimension of *ca.* 400 cm, calculating the average Indian elephant's shoulder-height at 300 cm. It may well be that the true scaler reading of Mughal palatial architecture, at least in its more public parts, should be derived from the elephant. A careful verification of this hypothesis, backed-up by measured surveys, could revolutionise not a few false assumptions.

Returning to Italy, it is not surprising to find that a dynasty as keenly aware as the Medici of the value of drama, did not ignore the 'theatrical' potential of this noble animal. A white elephant called Annone, gift of Emanuel I, King of Portugal,[6] lived at the court of Pope Leo X Medici from AD 1515 to 1516. It was exhibited as a 'marvel', and Raphael painted his picture, but it does not seem to have ever carried the supreme Pontiff on its back through the streets of Rome.

Notes and References

1. See the basic text, Ludovico Zorzi, 'Firenze: il teatro e la città', in *Il teatro e la città. Saggi sulla scena italiana* (Turin, 1977), pp. 63–234, with an ample bibliography.
2. Abu'l Fazl, *A'in-i Akbari*, tr. H. Blochmann (rpt. Delhi, 1965), p. 47 and f. Blochmann's drawings of the Mughal camp published together with the translation of the *A'in* have no proper scientific basis. But the description of Abu'l Fazl and a few surviving drawings including a painting on cloth conserved at the Tropen Museum in Amesterdam provide a relatively faithful reconstruction.
3. See Attilio Petruccioli, *Fatehpur Sikri. Gittà delle Sole e delle Acque* (Rome, 1987), in particular the first chapter.
4. This argument is amply developed in Petruccioli, ibid., in the section entitled 'Il preteso Diwan-i Khass come allegoria del pellgrinaggio interiore'.
5. See Sadiq Naqvi, *Qutb Shahi Ashur Khanas of Hyderabad City* (Hyderabad, 1982).
6. See Rosa Maria Cimino, 'Un elefante alla corte dei Papi', *Atti della Accademia delle Scienze di Torino*, vol. 118, 1983–4, pp. 72–87.

CHAPTER III.4

Hanging Gardens in the Princely Capitals of Rajasthan and in Renaissance Italy: Sacred Space, Earthly Paradise, Secular Ritual*

JAN PIEPER

'The trees have their roots at a level
Where their crowns should be.'
Seneca on the Hanging Gardens of the Romans



The false paradises of Italian Renaissance literature, dreamt up by the chivalrous heroes to ensnare beautiful witches and wicked fairies, are such fantastic fusions of natural and artificial worlds that they seem to anticipate the revival of Eden. The wayfarer believes he has come to the end of his wanderings, for here he finds the curse of the Fall of man absolved, the hostility of the animals tamed, and a Nature generously bestowing her gifts. Indeed, even the houses and palaces she builds for him show that perfect harmony which he himself merely managed to approximate in his classical orders and proportions. The old dream of the unity of nature and art, to which every plant calyx and every milkwort blossom amply testify, here seems to have come true and the art of building has at last become reconciled with life.

But just here in this liberating unity of nature and art, which the beguiling harbingers of the realm of magic succeed in simulating for a

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deceptive moment, the watchful wayfarer is obliged to acknowledge the impossible: the tempting abolition of the antithesis between nature and the work of man reveals itself to be an illusion created by black magic.

In Matteo Maria Boiardo's 'Orlando Innamorato' (AD 1483) Rinaldo, who finds himself on the perfectly round island of 'Palazzo Zoioso', realises even when entering Angelica's palace that he has landed in an enchanted world. Before his eyes looms a wondrous edifice, built entirely of marble and so smoothly polished that the garden is reflected in its walls:

Un bel palagio se mostrava
Fatto di un marmo si terso e polito,
Che il giardin tutto in esso se specchiava.

In these marble walls so perfectly wrought 'that the reflected garden appears, dematerialised, to permeate them', Rinaldo perceives an unnatural transition from nature to art which he interprets as warning of the supernatural perils awaiting him inside the enchanted castle. As he continues on his way he notices how garden and architecture, nature and art permeate each other, not merely in the reflectiveness of the wall but concretely in the ritual structure of the palace which he now enters:

Giardini occulti di fresca verdura
Son sopra a'tetti e per terra nascosi.

Before him he sees mysterious gardens, above on the roofs and sunken into the palace courtyards. Thus Boiardo can think of no more appropriate attribute to signify the unreality of his enchanted castle than 'hanging' and 'sunken' gardens.

This intentional literary use of the topos conveys something of the fascination peculiar to this type of structure, the hanging garden. It is the fascination for trees apparently growing in the air, trees which do not take root in the ground but stand instead in artificially raised gardens, on multistoreyed substructures or on the roofs and upper terraces of functional buildings. The particular aesthetic charm of such a structure lies in the ambiguity of its nature as a cross between flora and architecture, in which the antitheses of art and nature appear to merge.

II

Even classical antiquity was receptive towards the aesthetic charm of a building style which overstepped the confining bounds of architectural theory by taking the tree out of its natural environment and placing it

on artificial arched vaults and pillars. The largest grave monuments of the Romans, the mausoleums of Augustus and Hadrian, were tumulus structures composed of concentric rings of masonry whose stepped terraces were planted, following ancient Italic tradition, with evergreen trees. The choice usually fell on the cypress which, presumably because of its flame-like outline, was sacred to Apollo, the God of Light, and thus counted as a symbol of life. However, even without such a mythological basis the life symbolism of the practice of covering the stylised burial mound with living vegetation becomes clear, particularly as the lively motion of the trees in the wind is contrasted with the geometric severity of the lifeless stone. Thus the natural characteristics of the tree, its living growth and its movement which, although dependent on the wind, is seemingly self-produced, are used here to characterise a structure intended as a manifestation of human hope in life.

At the same time, this attributive use of the tree also implies a monumentalising of the structure. The tree as an independent large-scale aspect of nature and one of the largest organisms on earth is here an ornamental accessory and thus magnifies the actual size of the structure into colossal, monumental dimensions. Both characteristics of this Roman link between tree and architecture are known down to modern times. They were a favourite theme in the depiction of Roman antiquities from Ligorio to Piranesi, and this helped retain an awareness of the sepulchral and monumental character of the tree atop a building. The architecturally mounted tree on pedestal or terrace is, to a certain extent, the *Cantus Firmus* of monumental architecture. Projects such as Piranesi's frontispiece designs for the second and third volumes of *Antichità Romane* (AD 1756), Boullée's cenotaph for Newton (AD 1784) or Schinkel's design for a monument to Frederick the Great on Hofapotheke Square in Berlin (AD 1829) all envisaged the planting of trees on the upper platforms, hence deliberately arousing grave-cult associations, but also magnifying the true size of the projected monuments to immense dimensions.

III

In the hanging garden the relationship between architecture and tree is reversed: it is not the tree that distinguishes the structure, rather the structure becomes the subordinate necessity with the tree as its true theme, which it supports, holds aloft and lets unfold as an art form. Lequeu's *Palais Champpêtre* (*ca.* 1790), where the principle of the

hanging garden is carried to extremes, demonstrates the fundamental difference between the two architectural approaches to the tree: the theme of the building is the celebration of nourishing and pleasing nature, represented by a grove of pruned trees 'full of fruit', as stated in the accompanying text. A compact plinth structure on classical lines, whose rusticated façade conceals a gallery of 'notables', carries an open, pillared hall filled with fruit. Above this rises a shallow, tiered mound with the living tree architecture growing up from it. The stone architecture appears to culminate in the growing architecture and the classical substructure is reduced to a crude pedestal for the superior art of nature, which can be expressed both as *Ars Topiaria* and *Ars Fructuaria* at once.

It need interest us no further why Lequeu so definitely gives nature pride of place over architecture in his often enigmatic treatise. There is no doubt that the reduction of the classical corpus of forms to a building aid for architecture is not typical of the structure type of the hanging garden. Yet one cannot really speak of a hanging garden unless architecture and garden are equally juxtaposed, when substructure and plantation contribute more or less equally, both in proportion and in aesthetic effect, to the total impression. A simple roof terrace, a mere gallery with pergolas or a rooftop garden with small plants and flowers would not be called a 'hanging garden'. Even the Romans made a clear distinction here between the 'solaria' and the 'horti pensiles'. Seneca, in one of his letters,[1] refers to the difference between a 'hanging' or 'pensile' garden proper in the Roman context. Landscaped rooftops and pergolas covered in trailing vines he calls 'solaria', while large tree plantations on man-made substructures, such as those which Lucullus had laid out on the Pincio Hill or Maecenas on the Esquiline were known to the Romans as 'horti pensiles'—hanging gardens. The term 'hanging gardens' apparently originated in contemporary Roman usage around the birth of Christ, although the phenomenon thus designated is far older. In the second book of his *Historical Library*, written during the rule of Augustus, Diodorus Siculus relates how a King Syros of Babylon laid out a garden with groves of trees on an artificially raised foundation near his castle, which later became the legendary 'Hanging Gardens of Semiramis'. What really happened is this: in Syros's household there lived a lady from faraway Persia to whom the king was particularly attached. After many years spent in the treeless plain of Mesopotamia she could no longer quell her longing for the mountain woods of her native land, so she begged the king to let her return home. Thereupon the king ordered a garden to be laid out in imitation of the typical features found in Persia.

Near the palace artificial mounds were heaped up to look like mountains and planted with trees from the mountains of Persia.[2]

Seen from outside, the stacked terraces resembled the ascending tiers of a theatre, although far steeper and rising up to a height of 120 m (!) altogether. Inside, however, the terraces were hollow and supported by narrow, vaulted passageways resembling pan-pipes in cross section. These vaults in turn were covered by layers of reeds soaked in asphalt, cast gypsum bricks and folded lead sheeting to prevent moisture from the soil from filtering through to the masonry of the inner chambers. Soil was heaped up on top of this in such quantities that the roots of even large trees had ample space. The archaeologist Koldewey hit upon the foundations of a structure which corresponded closely to this written tradition in the vicinity of the Ishtar Gate, in the eastern half of the palace at Babylon. In AD 1918 he published the findings of his excavation together with suggested reconstruction of the hanging gardens.[3] According to this, the legendary structure called after Semiramis consisted of a free-standing, multi-chambered construction inserted inside a densely celled square. The walls of the inner chambers are remarkably thick, and were obviously built to withstand enormous pressure. There was no structural connection whatsoever between this innermost complex and the outer square, so that even when the construction started to settle under the pressure of the colossal masses of earth of the 'man-made mountain' and the 'trees growing skywards', no damage was done to neighbouring buildings.

To describe this structure, which Koldewey excavated and of which wondrous things were told by the Greek historiographers, Diodorus culled from his Greek sources the epithet 'kremastos', whose literal meaning can either be 'hung up' or 'hovering'. The Latinists translated the term as 'pensilis'—from 'pendere', 'to weigh, hang from the weighing scales'—and so narrowed its lexical meaning towards 'hanging'. Thus the curious compound 'Hanging Gardens' was born and made its way via Italian 'giardino pensile' to the modern languages where, regardless of all Germanic or Romance adaptations, it has retained the flavour of the peculiar, the exotic, even the bizarre.

V

As it wandered westwards—slowly increasing the spatial and temporal distance from its origin in the Babylon of the legendary Semiramis the hanging garden managed to retain its fairy-tale associations, at least in the beginning. In the course of time, the focus of interest gradually

shifted from the undisguised mania for marvels to a speculative inquiry into the complex relations between nature and art, between the facts of nature and the work of man.

True to their penchant for classification, the Greeks listed the hanging gardens among the Seven Wonders of the World. As a result, they provided the basic material for centuries of literary and artistic depictions of the Wonders. During the Renaissance and Mannerism periods a peculiar taste for the hanging gardens of Semiramis developed, as recorded in a bizarre folio from the *Cosmographia* of Sebastian Münster (AD 1550). Here the substructure of the legendary construction is depicted as the turned legs of a massive marble box-table. This is filled with earth, with matured trees rooted in it. Not merely have the plants here been more or less turned into *objets d'art*, but the characterisation of the construction as a massive piece of furniture reduces the trees to interior fittings. This distortion of scale, which allows the beholder of the print to see with the eye of God, makes the tree—the largest plant we know!—look like a part of the human household. It could hardly be expressed more unequivocally that nature here has been rendered manageable and disposable.

This interest in the hanging garden as a type of structure which illustrates the—perhaps merely a vain hope—power relations between man and subordinate nature makes its first literary appearance in the work of Antonio di Averlino, alias Filarete (AD 1400–69). In his architectural tract he tells of the fabled hanging gardens of the city of Plusiapolis, which were laid out on the tiers of an artificial mound five terraces high. This description shows Filarete to have been a creative architect with a masterly understanding of form. Still, he can hardly be given the credit for rediscovering the whole structure type. For in the years when he was working on his tract—between AD 1461 and 1464—no less than a fashion for hanging gardens was started, as can be determined from the actual building activity of the period.

From this contemporaneity it follows that Filarete took up ideas which must have been generally preoccupying the architects and building-crazy potentates of the early Italian Renaissance. Admittedly all the hanging gardens which were actually erected are considerably smaller than Filarete's visionary project, but they are comparable to the five-storeyed hanging gardens of Plusiapolis in so far as they allocate the forms of nature, of topography, and of vegetation, in varying degrees of stylisation and artificiality, to man's dwelling-house. In one decisive point, however, they even go one step further than Filarete's projected ideal: whereas in the hanging gardens of Plusiapolis the understanding

of nature is reflected merely in the landscape and trees, i.e., the nature of the *plant* kingdom is drawn into relationship with the human position, the actually constructed hanging gardens of the early Renaissance also encompass the nature of the *animal* kingdom—the realm of the bestial, the sensual, and unconscious.

The first project to present this comprehensive perception of nature was the hanging gardens erected between AD 1459 and 1462 by Pius II behind the palace of Pienza, the ideal town he founded in Tuscany. It was so novel and yet satisfied so precisely a need of the period that it sparked off a real craze for building ganging gardens: in AD 1467 Pius's successor, Paul II, had a hanging garden built at his Palazzo Venezia; in AD 1468 his example was followed by Pius' former commander-in-chief, Prince Federico da Montefeltro, in Urbino and finally, about AD 1530, by Cardinal della Valle-Capranica. At the start of the sixteenth century the Gonzaga family erected their hanging garden at the Palazzo Ducale in Mantua, towards the middle of the century the Medici family followed with a similar garden on the roof of the Loggia dei Lanzi in Florence, and shortly before AD 1600 the hanging garden of the Colonna of Zagarolo was completed. This unique fashion, to which practically every principality in Italy succumbed, came to a final climax in the Borromean Islands of Lago Maggiore: some time after AD 1630, the Isola Bella was created in the form of a terraced mound 10 tiers high, with a vaulted reservoir for irrigating the gardens concealed in its interior and terraces planted alternately with living and metal trees.

VI

In the East, hanging gardens remained an attribute of royal power well into modern times. An early instance of this is the landscaping of the palace grounds which Solomon laid out in the vicinity of the temple of Jerusalem. His palace, termed 'House of the Forest of Lebanon' in biblical sources, was not given this epithet only because it was built from timber of the famous cedars, but primarily because closely attached to the royal quarters there was a garden, laid out on top of artificial substructures, adorned with a grove of cedars from Lebanon. According to Jewish tradition the king resided there in state, in a kind of earthly paradise high above the plain and the low-lying quarters where his subjects lived.[4]

Very similar structures were built in Iran as late as the nineteenth century. Perhaps the best known of these royal gardens is the one of Qasr-i-Qajar, which was laid out near Teheran around AD 1797.[5] Like

all Persian gardens of this type Qasr-i-Qajar is divided into three: the southern part is a huge flat area, regularly intersected by canals irrigating rectangular flower-beds and orchards planted with almond trees. The whole is enclosed by a massive masonry wall and the area thus shut off from the outer world may be read as a model representation of the fertile and productive agricultural landscape of the Iranian plateau. Towards the north is a rocky cliff transformed into a terraced garden of five tiers and crowned with a square fortress-like building. Its walls and towers conceal an elevated garden, quadripartite like the Garden of Paradise, and laid out upon artificial substructures. Between these antipodes of the Qasr-i-Qajar Gardens is a shallow water basin, rectangular in shape and of enormous dimensions, which is called the 'Ocean'. The whole arrangement is an obvious representation of the ancient Iranian cosmological model, based upon the idea of a colossal mountain Sad matati—i.e., 'great mountain of the lands'—which is supposed to be located across the sea towards the north of the inhabited parts.[6]

The idea of a multi-tiered mountain at the centre of the earth, where the gods live happily under wish-fulfilling trees, remained an inspiring image despite the thorough Islamisation of Iran. This is particularly evident from some details of the Persian state ritual. When the Shah was sitting in state in his hanging garden of Qasr-i-Qajar he had beside him an artificial tree made from precious metal, bearing jewels and golden fruits filled with wine. Evidently this attribute of royalty is a minute representation of the legendary wish-fulfilling tree, which ancient mid-Eastern imagination had placed upon the mythical world mountain.

The same concept is the matrix of the Indian 'Meru', the world mountain in the far north, which is also multi-tiered and grows wish-fulfilling trees in paradises on the summits of its various foothills. We have an architectural representation of this in the compound of the Jain temple of Lodurva near Jaisalmer: a model mountain carved from stone, rising in tiers and enclosed by a crenellated wall at each level, carries on top an artificial tree made from silver-plated copper. This is *Kalpavriksha*, the wish-fulfilling tree of Indian mythology, believed by some to grow in Indra's paradise on the Ilavarta foothills of Mount Meru.[7]

The multi-tiered mountain with paradises and trees of happiness seems to be the conceptual model of many an Indian hanging garden. Most of them were built as architectural requisites of royal centres, but not necessary as a backdrop of secular power. Some are merely laid out as an evocation of the earthly paradise and definitely serve worldly pleasures.

A wonderful hanging garden of this type is Maunbari, built in the vicinity of the impressive palace of Amber in Rajasthan. It is an artificial island rising in three tiers from the lake below the palace. Absolutely regular in shape, with two rectangular platforms supporting a square, quadripartite garden on top, it is made to resemble the gardens of paradise. Water is pumped from the lake to a central fountain in the uppermost hanging garden and from there it flows down in open channels leading into the four directions.

Maunbari garden was a lady's garden and it was used only at night, when it was cool enough to sit in the open even during the hot season. The ladies were brought down from the palace by means of an ingenious transport system, which can still be seen in ruins on the steep slope of the castle hill. From the *zenana* the girls passed over an elevated passage to a tower, where they were lowered in a 'basket-and-rope-elevator' to the next level, again passed over an elevated stone passage to another tower, were lowered again, and so on, until they reached the level of Maunbari. Thus they could enter the hanging garden in the lake without taking the trouble to climb up and down the rocky hill.

Maunbari garden is a night garden and it is ingeniously designed for this purpose. Obviously, in a night garden there is no need for trees, since there is no need for shade, and it would be similarly senseless to grow colourful flowers as it would be impossible to admire them in moonlight which veils all colours behind a shading of light and dark. Therefore, all subdivisions of the gardens are made from plastered brick walls, about a foot high, which form an overall geometrical pattern laid across the garden like an ornamental carpet. This pattern is clearly visible at night as it casts a sharply contoured shadow. The compartments form the individual flower beds, planted with white or very bright flowers which seem to be luminescent under the moon. Moreover, most flowers belong to highly aromatic species, filling the night air with their sweet-smelling perfume.

But Maunbari is not only a garden of fragrance, it is also a garden of sparkling lights. The water jetting down from the central fountain is brought to the edge of the upper platform in four shallow canals. From there it flows down in transverse direction over *chadars* (water stairs) and purls off in the garden. In longitudinal direction, however, it flows in waterfalls from one terrace to the other until a final *chadar* brings it down into the lake. The waterfalls are instrumental in producing the peculiar effect of sparkling lights. As the water runs over polished marble slabs it is transformed into a very thin and regular screen of

water. Behind this water curtain is a wall with some 100 niches elaborately carved with multifoil arches. Before the ladies arrived, the garden attendants would place oil lamps into each of the niches. As the curtain of water is translucent and in motion, one could see the lights behind, so the flow of the water turned it into never-ending irradiations and reflections—as if it were a miniature sky with all its stars come alive.

In some palaces of Rajasthan however, hanging gardens were not constructed for the simple end of such worldly pleasures alone, but they were meant to evoke the image of paradise as a proper setting for royalty and as an intentional backdrop for the display of secular power.

In AD 1699 the Maharana of Udaipur completed his palace with the construction of Bari Mahal, a hanging garden on the top floor of his family fortress, grown over centuries into a complex of colossal, mountain-like dimensions.

The garden is built over vaulted substructures which conceal the highest peak of the rock where the whole castle is located upon. They are five storeys high, totally dark, reached only through narrow passages at each level, which are opened only for repairs and inspections.

One enters Bari Mahal after a long and steep climb over staircases cut into the walls. A little door unexpectedly gives way to a large and regular square courtyard, closed in on all sides by beautifully carved marble arcades, which towards the north are opened up to form a spacious pillared audience hall.

In the central square of the courtyard grow large trees which raise their century-old tops high above pavilions and archways of the palace. The trunks rise from geometrically carved multifoil openings in the marble pavement, suggesting that skilfully heaped up garden-earth of an ordinary orchard was magically transformed here into some nobler and more permanent material: as if to ennoble the gardener's modest art, the old trees are set like the true jewels of this garden into their precious marble mountings.

The artful setting of the trees reminds us of what might easily be forgotten within this marble courtyard—that the trees are not growing at ground floor level and not in natural soil, but that they were lifted by an ingenious construction high up into the air. The marble detailing of the pavement brings the aesthetic fascination of hanging gardens sharply to the point as it accentuates the double nature of this building type, where architecture and plants were brought together in a fabric which is both art and nature.

A contemporary painting—hung today on the wall of the north

pavilion—clearly shows that it was not simply for these aesthetic pleasures that the Maharana crowned his palace with a hanging garden. Unmistakably, it was part and parcel of the system of symbols and gestures developed to display the self-understanding of this Rajput court, and to legitimise it at the same time.

It was this hanging garden where the Maharana regularly summoned the nobility of his court, where he sat in state to administer justice, to proclaim the resolution of his council, or to read publicly from the Holy Scriptures.

Hence the garden constituted a space essential to the choreography of the state ritual and this might explain why it was laid out as a hanging garden, as a grove of trees on the summit of an artificial mountain. Clearly, the allusion to mythical topography, to the multi-tiered world mountain with the *Kalpavriksha* on top, is intentional and symbolic. And it is also an obvious attempt towards legitimisation of worldly power. Here it is the function of the hanging garden to reinforce the ruler's supremacy by resorting to the paradise iconography to elevate this state to a mythical level: in the state ritual the ruler sits in the shade of his trees which appear raised above nature, and the proclamation of his edicts, the granting of his mercy, the issuing of his harsh decrees in this place thus represent the fruits of the wish-fulfilling trees. With a similar purpose in mind, the Mughal Emperor Akbar had his throne in Fatehpur Sikri built in the form of a stone tree and from its crown, out of sight above the heads of the courtiers, he used to proclaim his will—finally and irrevocably like the fabled bird in the tree of life who picks out lots determining the fate of each one of us.

Notes and References

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SECTION IV

Art and Politics



CHAPTER IV.1

Sources and Determinants of the Architecture at Fatehpur Sikri*

RAM NATH



Akbar inherited a minor kingdom and left behind a vast empire, a firmly established state with its own political and administrative institutions and a court culture that established an ideal for an entire civilisation.[1] Soon after his accession in AD 1556, he realised that theocracy was weakening the Muslim state in India and alienating the population. To root the state more firmly in India, he had first to rid it of its Arabic aspect and make it essentially Indian. To do this he embarked upon a series of bold innovations, which included abolishing the *jizya* and other discriminatory taxes, forming a matrimonial alliance with the Rajputs, instituting the house of worship, or 'Ibadatkhana, the mansabdari system of ranking the nobility, and the *mahzar*, and promulgated the Din-i-Ilahi and the solar calendar. These revolutionised the form and fabric of the Indian state.

Akbar adhered to the ancient Persian concept of divine kingship and renounced the Arabic idea of *khilafat*. By the *mahzar* of AD 1579, he proclaimed himself supreme temporal and spiritual authority (*imam-i 'adil*), as Badauni testified.[2] He favoured Persian, and discouraged the study of Arabic and the use of Arabic names. Instead of religious subjects, he commanded his people to learn history, literature, philosophy, astronomy, mathematics, and medicine.[3] He had a special liking for Sanskrit

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names; Badauni tells us, 'he asked Purushottam [a learned Brahman] to invent particular Sanskrit names for all things in existence'.[4] The *chhatra* was among the ensigns of his royalty,[6] and Sanskrit terms appear in descriptions of his *farrashkhana*[7] and clothes in the imperial wardrobe.[8] Instead of the lunar Hijra calendar, he instituted a solar *tar'ikh-i Ilahi* one, in which the old Persian months of the Yazdigird era were used with the suffix *mah-i jalali*.[9] These innovations were all intended to suppress the theocracy the *ulema* had imposed upon the Sultanate in the name of Islam and the pan-Arabism which that orthodoxy was meant to secure.[10]

Badauni also noted that 'His Majesty, on hearing further how much the people of the country prized their institutions, began to look upon them with affection.'[11] Akbar adopted such Indian customs as *rakhi, tilaka, jharokha-darshana, tuladana*, and sun worship, not only as personal rituals but also for those of his state, in imitation of the Cakravartin sovereigns of the country. He liberally patronised Indian literature in Sanskrit, Persian, and Hindi, and music, painting, and architecture through departments called *karkhanas*. He deliberately set about establishing rapport with the indigenous population so that the Mughals could live in India as the Guptas and the Pratiharas had lived before them.

He assembled musicians and, utilising the legacy of Raja Mansimha Tomara of Gwalior (AD 1486–1516), encouraged them to combine the classical order with the newly introduced Iranian notes; from the integrated system they evolved the *desi*, or what we now call the 'Hindustani' style, which is still the backbone of Indian music today. He organised a painting atelier under the supervision of two Iranian masters and summoned painters from Rajasthan, Gujarat, and Malwa.

They brought their pigments, colour combinations, shades, techniques, themes, motifs and other elements which were gradually assimilated to become the Mughal style of painting; under the patronage of the paramount power, it was by the end of the sixteenth century the dominant style in India. The later styles which were practised in the vassal Rajput states freely drew on this repertoire for the first time in India. The artists were emancipated from the stagnation of Sastric control. Freedom from the rigid dogmas brought freshness and ingenuity to their art, and they were as prolific as they were versatile, sustained by Mughal patronage.

The architecture of Fatehpur Sikri illustrates all of these trends. Abu'l Fazl, who tells us a great deal in his narrative about Akbar's various cultural interests, refers to his love of architecture in a short chapter entitled 'On Buildings'.[12] Though brief, it is a useful contemporary record. From it we learn that, as 'a source of splendour for the government',

architecture fulfilled a ceremonial function.[13] People assembled in cities, and that is why the proper upkeep of towns was the state's concern. Akbar was very interested in buildings and, in addition to financing them, he involved himself in their planning and execution. Residential palaces, gateways, mosques, *madrasas*, *serais*, tanks, wells, and a host of other public buildings were constructed during his reign. The historian notes that Akbar 'inquired into every detail connected with this department' (the *divan-i 'imarat*), indicating that he discussed the theoretical and practical aspects of building with artisans and other knowledgeable persons, just as he discussed theology with the pundits of various religions. Abu'l Fazl concludes, 'He has passed new regulations, kindled the lamp of honesty and put a stock of practical knowledge into the hands of simple and inexperienced men.'[14]

Chapters 86 to 88[15] of the *A'in-i Akbari* corroborate this statement. They tell us that the cost and quality of the building material were standardised and the system was institutionalised according to the tenets of practical knowledge (*prayoga, vyavahara,* and *abhyasa*) so that even unskilled labour could be taught to work in this style. Architecture developed under his patronage and guidance.

Theory (*sastra*) determined the form of architecture in ancient India in all its four categories: residential (*nagara, durga, prasada, grha*, etc.), and water structures (*sarovara, kunda, tadaga, baoli, kupa*, etc.), and even the mightiest king could not venture to violate it. He could only pick and choose from among a thousand forms prescribed by the texts. It was the single-most powerful determinant of Indian temple architecture for example. The establishment of Muslim rule in India initiated an altogether different process. Theocracy prevailed during the Sultanate period (AD 1192–1526) somewhat more rigidly than in Muslim countries further west, such as Iran and Egypt, and Islamic puritanism kept a watchful eye on the practice of the fine arts. In the absence of a theory that could guide both the patron and builders, the main source of art dried up and court patronage became decisive. During this period, where, what, how, with what material, and on what scale were determined solely by the tastes and preferences of the patron. He could choose elements in disregard of climatic and historical factors, as Firuz Shah Tughluq (AD 1351–88) did, or he could leave the artisans to their own inspiration within a broad framework, as Sher Shah Sur (AD 1540–5) did. In this situation, a liberal and enlightened patron like Akbar made a world of difference.

When Akbar decided to found a town at Fatehpur Sikri, he had no texts before him. The theory was more or less represented by the artists

traditions of the *salats* (*silawats*; Skt. *silpakara*) which he drew from two main sources: the Jamuna–Chambal region comprising Delhi, Agra, Fatehpur Sikri, Dholpur, and Gwalior; and the Malwa–Gujarat–Rajasthan area. His grandfather Babur had engaged the stonecutters from the first area for his several projects at Agra, Fatehpur Sikri, and Dholpur, as he tells us in his memoirs.[16] Their guilds had been working with the new patrons for several generations before Babur, and had already absorbed new elements into their art. They were proficient in both brick and stone construction and used the local idioms that had developed over the centuries. The artisans from the Malwa–Gujarat–Rajasthan region were expert in working both wood and stone, and could faithfully translate wooden forms into stone. They were more rigidly trained than their local counterparts. *Sastra* was in their practice, and it was mostly through them that classical elements appear at Fatehpur Sikri in the secular buildings. They gave forms to the dicta laid down by such *silpa* texts on house and palace architecture as the *Samarangana-Sutradhara* of Bhoja (AD 1018–54), the *Parimana-Manjari* of Malla (*ca.* eleventh century), the *Silpa-Dipaka* of Gangadhara (*ca.* fourteenth century), and the *Raja-Vallabha* of Mandana (*ca.* 1450).[17]

How these various artistic traditions converged at Fatehpur Sikri and were reconciled through the expertise of Akbar's artisans and the power of his own dominant personality to form the most original style of medieval India, and what the sources and determinants of this formative process were, can best be ascertained by studying the architecture itself.

Akbar had decided to make Fatehpur Sikri his residential headquarters without disturbing the capital status of Agra when he moved there in AD 1572. Unlike Agra, which was already an established city when he took it over, Fatehpur Sikri was built from scratch and could be regularly laid out and planned.[18] The seasonal river Khari Nadi was dammed at Terah Mori (lit. 'thirteen sluices') to form a great lake that provided water for use the year round as well as a beautiful setting. A stone enclosing wall pierced by gates was built around the town, which was sited on a ridge for effect as well as for security. Paved roads and crossroads with bazaars were laid out. The area on the ridge was reserved for royal mansions, and the land on either side was allotted to ordinary people for their houses in return for a small fee. Houses and gardens for nobles were built outside the city's confines.

The ridge sloped in a north-easterly direction, and had to be terraced. The highest terrace held the sacred complex (Sahn-i 'Ibadat), including the Stonecutters' Mosque, the Jami Masjid, and the tomb of Shaikh

Salim ad-Din Chisti. The imperial complex (Sahn-i Khass) lay on the second terrace at a much lower level and included the royal mansions, e.g., the Raniwas, Mahal-i Ilahi, and the Baithak (Fig. 1).[19] The Shahi Bazaar and the Mina Bazaar[20] on one side and an indoor garden on the other were built on still lower levels. Open spaces were kept for ventilation and for the water supply. It was designed to be a residential complex and hence was enclosed and secured.

The public court (Sahn-i Rayyat) included the Panch Mahal Khwabgah, Shahi Kutubkhana, Ekastambha Prasada, and the Divan-i Khass. The courtiers, nobles, and ambassadors had access to this court where the various administrative and cultural affairs of the Mughal government took place.

The buildings of all three complexes on the three receding levels are oriented on the north-south axis of the ridge, facing either east or north. The regular provision of open spaces between them and the separation for purdah and security of the living quarters by high walls show that the layout was planned to accord both with the dictates of terrain and with climatic and social conditions. This is confirmed by the way the drainage and water supply were worked out by the builders. Rain water was collected and stored in a *jhalra*, two underground *birkhas* and a number of tanks, *kundas*, and reservoirs for use the year round. The drains and reservoirs were planned in advance and built simultaneously with the building. Two waterworks, one on either side of the ridge, were also planned with the palaces to ensure a regular supply of water throughout the year.

The mosques and schools referred to by Abu'l Fazl and other historians were part of the sacred complex; public works such as *serais*, wells, *baolis*, tanks, and gardens were laid out on both sides at the foot of the ridge. The town was provided with all the amenities of contemporary urban life. It showed a skilful use of the terrain; it used red sandstone, the most easily available building material; it took into account climatic conditions; it provided for light, ventilation, sanitation, with its system of drainage and water collection; and it fulfilled the social requirements of purdah and the political requirements of security. This was a difficult task and it is to the credit of the builders that they were able to produce such a balanced, unified, and homogeneous plan for this little habitat.

The buildings of the three complexes are oriented north and east, the two best directions in the tropical climate of India. The *silpa* texts discuss orientation and recommend east as the most suitable direction.[21] Astronomy and astrology also played an important role: every aspect

of civil architecture was minutely considered for its auspicious or inauspicious effects, which in practice provided for adjustments to topography. The Mughals firmly believed in astrology; from Humayun to Shah Jahan, their daily actions were regulated by astronomical predictions; as contemporary histories testify, the astrolabe played as important a role in the Mughal polity as did the sword. It is not surprising then that builders were guided in their practice by the prescriptions of the *silpa* texts.

The Mughal encampment system was a vast and complicated, but perfectly orderly, arrangement of wood, canvas, and cloth houses, called *shamiyanas*, *chholdaris*, *chandovas*, *raotis*, *namgirs*, and *sarapardas*, and tents known as *bargah, gulal-bar, do-ashiyana-manzil* and the Divan-i Khass.[22] The Mughal camp was, in fact, a mini-city on wheels. To move it required 100 elephants, 500 camels, 400 carts, and 100 bearers, escorted by 500 troopers, *mansabdars*, and *ahadis*. A thousand *farrashes*, 500 scouts, 100 watercarriers, fifty carpenters, tentmakers, and torchbearers, thirty workers in leather, and 150 sweepers were employed to assemble and maintain it.[23]

As can be surmised by the uniform alignment of the three complexes, the intermittent open spaces, and the enclosing walls, the town planning of Fatehpur Sikri was also to some extent inspired by the Mughal encampment system. A number of the stone buildings and pavilions of Fatehpur Sikri could also have had their prototypes in the wooden *raotis* and cloth *chandovas* of the Mughal camp. The enclosed and covered passages from the Kutubkhana to Khwabgah on the ground floor, or from the Sahn-i Rayyat to the Sahn-i Khass, and to the Panch Mahal, are stone translations of canvas-and-carpet *sarapardas*. Similarly, the *khaprel* roofs of the Khwabgah resemble the five-awning *chandova* of the Mughal camp. The oblong *chhaparkhats* that constitute the superstructure for a number of buildings are stone replicas of wooden *raotis* described by Abu'l Fazl. These architectural forms suggest their source of inspiration, just as the overall town plan resembles the layout of the Mughal camp.[24]

Plan and Design of the Buildings

In plan and elevation the residential palaces of Fatehpur Sikri are distinctive in their disposal of space both in themselves and in relation to each other. The apartments in the Rang Mahal and the Raniwas are as a rule disposed around an inner court in a four-sided (*catuḥsala*) arrangement that provides a vast open space in the interior. The gate is

composed of an arched portal with two pedestals (*chaukis*) on the sides, a bracket-and-lintel doorway and a porch (*poli*), providing a crooked entry into the court to ensure purdah and security. Ground floors invariably have *tibara* (from Skt. *tri-dvara*) and *duchhatti* (from Skt. *dvi chadya*) compositions with a central *dalan* of three openings and two storey apartments on the sides opening onto it. All the suites are architecturally separated, but interconnected on a single plan. Spacious inner courts and open *dalans* provided light and air to the inhabitants of the harem who lived in strict purdah and seclusion. Open terraces run along the ground-floor living rooms in the Raniwas. Each complex was furnished with a set of baths, a toilet, a water-supply system, and the other paraphernalia of a residential palace. The buildings were planned and designed to ensure the comfort required by the status of the inhabitant, the customs of the time, and the climatic conditions of Fatehpur Sikri. These palaces in fact set the style for residential architecture; the *poli*-entrance, *tibara-dalan*, and *duchhatti* rooms remained in use in domestic architecture for nearly three centuries.

Though *duchhattis* were provided on the sides of the *liwan* of the Jami' Masjid, in the Baithak and the Khwabgah overlooking the Char Chamand tank, they are most effectively used with *tibara* in the structure known as Abu'l Fazl's House, the Rang Mahal, and the Raniwas (in the north and south-central blocks). Earlier examples are available in Akbar's Bengali Mahal in the Agra Fort and the Man Mandir at Gwalior.[25] It is by the later source that these compositions were inspired. *Poli, tibara,* and *duchhatti* features ensure maximum seclusion and security, and these elements, appear to have been developed and incorporated in palace architecture by the builders of the Jamuna–Chambal belt. The four-sided *catuḥsala* was an ancient plan, but *poli, tibara* and *duchhatti* were medieval innovations in the Indian house.

The architectural requirements of living quarters are different from those of a formal building. Living quarters were disposed around an inner court entered by a crooked entrance, and were provided with baths and other accessories; the court was generally closed on two sides and had a closed inner room (*kotha*) at either end. The inhabitants slept in the court in good weather both summer and winter, and used the inner room for privacy and the protection of their possessions and shelter from the weather. The buildings were constructed of brick or rubble walls, plastered for resistance to weather.

Stone buildings meant for formal use were open on all sides with colonnaded *dalans*, but no *kothas*. Not distinguishing between the two has led to misidentifications, and thence to misnomers such as Raja

Birbal's House, Maryam's House, the Turkish Sultana's House, and Tansen's Barahdari, all of which are in fact public buildings.[26]

It is also incorrect to assume that every building necessarily had a practical function. Buildings were not made for residential and official purposes only. A number were commemorative, or associated with Akbar's cultural activities or beliefs, and some were certainly symbolic. Gateways such as the Buland Darvaza are at least as ceremonial as they are functional. The Mahal-i Ilahi was not a residential palace, but was associated with Akbar's Din-i Ilahi. The Baithak was also not the residence of Maryam az-Zamani, but served as Akbar's drawing-room where he received his poets, musicians and painters. The Khwabgah Palace was his library, the Kutubkhana, where his 25,000 manuscripts on a wide variety of subjects were kept; the Turkish Sultana's House was its adjunct, whose uppermost storey was used as the *chitrasala*, or painting roof.

The most prominent of these ideological and symbolic buildings are the Panch Mahal and the Divan-i Khass or Ekastambha Prasada. The former is a pillared structure, open on all sides, in five receding storeys overlooking the public court. It was connected with the institution of Akbar's *jharoka-darshana*. In the latter, a single pillar supports a circular platform in the interior; it is unique in the whole range of medieval architecture in India. It was not a Divan-i Khass or 'Ibadatkhana; it performed no function. It was built to represent Akbar's belief in sun worship and to symbolise the ancient Indian concept of worlds sustenance through the axis pillar of the cosmic order as daily measured out by the *Surya-Purusa*. This axis (*ekastambha* = unitary pillar) sustains the three worlds in all the quarters of space: '*alamba-stambham-ekam-tribhuwana-bhuvanasya*'. It has thus been commemorated in the tradition of *sthuna, skambha, mahame u-dhvaja-stambha, trailokya-mahagrha-stambha*, and *kirtti-stambha*, in which Maharana Kumbha built his Kirttistambha tower in Chhittorgarh around the middle of the fifteenth century. Akbar's *ekastambha* had its prototype in the typical unitary wooden pillar of Gujarat, such as the bird roost. An awareness of the ideological and symbolic aspects of Akbar's architectural style is vital to its correct understanding; much of it was inspired by, and is a reflection of, his thought and personality.

Roofing poses the greatest architectural problem in all countries and in all ages. It is to the credit of Akbar's builders that they were able to devise a number of ingenious methods for roofing the buildings of Fatehpur Sikri. Plain flat ceilings (*samatala-vitana*) with stone slabs placed across the room on the walls or pillars to span the intermediary

space on a trabeate system in the simplest way were used on a very large scale, e.g., in the Stonecutters' Mosque; in the arcades and *dalans* of the Jami' Masjid; the ground-floor apartments of the Ranivas; the Bathak; the Panch Mahal, and the Khwabgah apartments. They are sometimes combined with side corbels designed as stalactites, as in the ground-floor rooms of the Mahal-i Ilahi. The *dalan*s around the tomb chamber of Shaikh Salim ad-Din Chishti were divided into square bays, each of which is roofed by corbelled slabs in the lantern style (*ksipta vitana*), making it appear as a circumambulatory, also a device of the trabeate order.

Though the baths and *karkhana*s of Fatehpur Sikri are invariably roofed by semispherical cupolas, domes are rare—there are hardly a dozen in the three complexes.[27] All have vaulted soffits and were raised with the help of temporary centering on the arcuate system. Some have squinches in the zone of transition; for example, the dome on the nave of the Jami' Masjid and the dome of the tomb of Shaikh Salim ad-Din Chishti. The central halls of the wings of the Jami' Masjid each have a dome, but instead of vault, squinch, or stalactite each has a beautifully designed corbelled pendentive in the zone of transition, a novel feature by which the stone-builders showed that they could dispense with the vault, squinch, and stalactite. The series of stone pendentives in the corbelling (*kadalika-karana*) has greater strength and aesthetic effect. The use of brackets with pendentives in the transition zone to support a dome in the first-floor rooms of the Mahal-i Ilahi is a similar but technically simpler and aesthetically more uniform method.

A large number of spacious main halls in the buildings at Fatehpur Sikri, such as Abu'l Fazl's and Fayzi's houses, the Divan-i Khass or Ekastambha Prasada, Divan-i 'Amm, Daftarkhana, and the structure called Tansen's Barahdari, have *ladao* or wagon-vaulted ceilings made up of stone ribs and panels in which beams have been used as ribs. It is used as efficiently in square as in rectangular halls. With the help of temporary centering, the builders were able to place the ribs in position in an interlocking system and fill in the space between the ribs by panels or slabs. Thus, though they used temporary centering and the load appears to rest vertically, it is in fact supported horizontally on stone walls, pillars, lintels, or beams. The Agra Fort and the Man Mandir at Gwalior[28] provide earlier examples, but it is here at Fatehpur Sikri that the technique has been worked out most successfully and with the greatest architectural merit.

A rib-and-panel soffit has also been used in each of the two domes of the Mahal-i Ilahi, but the most ingenious use of this technique is found

in the *chhappar* ceilings of the upper pavilions of Fayzi's House and the north and south upper pavilions of the Raniwas. It is almost triangular in section and resembles the typical ceiling of the village hut and the camel cart of Rajasthan, both of which are made of bamboo, reed, straw, and thatch. The stone ceilings appear to have been inspired by the simple folk structure of the latter. The builders used it earlier in the Man Mandir at Gwalior, though there it is in cruder form.[29] The Fatehpur Sikri examples are definitely more refined. It was in ways such as this that local idioms were introduced into the Mughal style of architecture by the builders of the Jamuna–Chambal belt.

To ensure the movement of royal personnel from one quarter to the next in strict purdah, closed and covered stone passages and viaducts connected the palatial mansions. A few of these have survived, such as the viaduct from the Raniwas to the Hiran Minar and that from the Khwabgah to the Panch Mahal on the first floor and to the Shahi Hammam on the ground floor. They represent a faithful but extremely simplified version in stone of the canvas-and-carpet *saraparda* or *qanat* of the Mughal camp,[30] where it was also used for separation, purdah, and security. Akbar's builders were proficient in translating wooden forms—and even temporary cloth-and-canvas forms—into permanent stone, and in drawing on all available sources to meet the patron's requirements. This feature too was an innovation in the medieval architecture of India.

Façades

The skilful organisation of the façade, aided by a number of pleasing openings and rhythmic lines to produce an aesthetic totality, was as basic a requirement of the architectural style as the superstructure, and both almost invariably supplemented each other. The Mughal builders used a wide variety of elements to create some of the most beautiful façades in medieval art. For them, they did not depend on the plinth-and-stairs formula that played such a prominent role in the art of Mandu, but relied rather on pillars, arch forms, bracket-and-eave compositions, *jharokha* windows, and *khaprel* roofs.

Simple square pillars, called *rucaka*, were used in the Khwabgah apartments. Though they are of the same type as in the Baithak and Mahal-i Ilahi, there they assumed rectangular form, while in the latter building they are paired to make piers with gorgeous carved ornamentation. Square pillars with recessed or chamfered angles called *bhadraka*,

have been used in the Stonecutters' Mosque and, most exquisitely, in the Raniwas that make up the façades of the four central blocks.

It is, however, the *misraka* type, a square base surmounted first by an octagonal form and then by a sixteen-sided or circular form with a stalactite capital, that is most often used here—it is the typical pillar of Fatehpur Sikri. It is found in, for example, the Rang Mahal, Jami' Masjid, tomb of Shaikh Salim ad-Din Chishti, Abu'l Fazl's House, Panch Mahal, adjunct to the Kutubkhana, Ekastambha Prasada, Daftarkhana, and the building called Todar Mal's Barahdari. In a number of buildings these have been used in pairs to constitute the *tibara* composition and make a beautiful façade, as in Abu'l Fazl's House.

The *bhadraka* pillar with *ghanta-mala* and *srivatsa* motifs on the shaft has obviously come from the temple art of the Malwa–Gujarat–Rajasthan region. The *misraka* type was, however, created by Akbar's builders. It has stylised *krittimukha* on the base, a chevron pattern on the shaft, and stalactites on the capital, and it is a perfect composition. *Bhadraka* could be used most effectively with bracket-and-lintel combinations; *misraka*s were as effective with arches as they were with bracket-and-lintel, as for example in the Barahdari. These columns had been used for the first time in the Bengali Mahal in the Agra Fort.

The arch as a basic constituent of façade composition is confined to the sacred complex. In the royal complex and the public court, it is mostly used ornamentally and without voussoirs. The arches of the Stonecutters' Mosque are made up of stone slabs shaped like an arch and rest horizontally. The arches of the Jami' Masjid, on the *qibla* wall, for example, also have no voussoirs and are not radiating or true arches. The arches in its *dalan*s are also built of stone slabs used as brackets and the superincumbent load rests, in each case, on a lintel supported by piers.

The arches of Fatehpur Sikri have no ogee, the feature so typical of Chanderi and Jaunpur, but a border of a stylised trident floral motif of lotus buds is generally used alone on the intrados. This border adds enormously to the aesthetic impression of the arch. The arch form is not a structural expedient at Fatehpur Sikri; it is used ornamentally to provide harmonious curved lines along with the emphatic horizontal lines of the overwhelming trabeate features, and accelerate the effect of the mass and volume of the order. A beautiful feature of the art of Fatehpur Sikri, it is a typical creation of the builders of the Jamuna–Chambal belt.

The arch-and-lintel entrance (with pilasters and brackets supporting

the lintel, and the whole contained in an ornamental arched frame, sometimes with *chaukis* on the sides) was a popular device of façade composition in the Sultanate period. Some prominent examples are in the square tombs of Delhi, beginning with the tomb of Ghiyath ad-Din Tughluq (d. AD 1325). Both the palaces of Fatehpur Sikri, the Rang Mahal and the Raniwas, have this entrance. Likewise, the *iwan* formula—by which a stupendous arch on a semioctagonal plan with ornamental accessories was placed on the main entrance or in the centre of the façade to give it an effect of grandeur and magnificence—was used in the Sultanate buildings; it is used most effectively in the Jami' Masjid of Fatehpur Sikri on its two gateways and façade with such beautiful superimposing features as pinnacles and *chhatris*.

The *dalan* arcades of the Jami' Masjid have a broad slanting eave supported on brackets above the arches, and a series of square *chhatris* above the parapet, one over each pillar, giving it an emphatic elevation. The harmonious combination of the horizontal line of the eave and the vertical line of the pillar-and-*chhatri*, with its mysterious play of light and shadow and its impressive roof, form a very pleasing composition. Noteworthy is the complete adjustment and integration of the arch form with such essentially trabeate elements as pillar, bracket-and-eave, and *chhatri*. It is a perfectly unified façade composition, which was later used with modifications on almost every public building—for example, the Jami' Masjid of Agra and the Moti Masjid of the Agra Fort (both dating from Shah Jahan's reign).

The façade composition of the portal is also a classical contribution of Fatehpur Sikri's builders. In it, the arch-and-lintel portal is flanked by ornamental alcoves which have overhanging *jharokha* windows, superimposed above the parapet by *chhatris*, as on the façade of the Raniwas. This also proved to be a formula that, with additions such as a *chhaparkhat* in the centre over the portal, and in a wide variety of forms, became a popular feature in later domestic architecture. The bracket-and-lintel entrance is set harmoniously within the arch of the portal, which bears a border of lotus buds, and the *jharokhas* and *chhatris* of unquestionably indigenous origin, with alcoves having stalactite soffits. Instead of alcoves the builders might have used *torana* niches, which constitute the most impressive feature of wall treatment in the interior; had they done so, however, the total aesthetic effect would have been spoiled. The *jharokha* is an element that has to be handled with care and precision, and that is why it is used so sparingly on the façade of

the Raniwas and the Mahal-i Ilahi. The Fatehpur Sikri builders were proficient in handling all the various techniques at their disposal to produce the best effect in monochrome red sandstone.

The bracket-and-eave combination is by far the most important constituent of façade composition in Fatehpur Sikri architecture. The eave was essential for protection against the sun and rain of a tropical climate and the bracket was used to support it.[31] It is to the credit of the builders that they were able to develop a simple structural feature to a magnificent scale and turn it into a distinctive feature of the style. The combination is found in almost every building. The Panch Mahal uses it to produce emphatic horizontal lines. The Ekastambha Prasada has ornate brackets on the exterior, and bracket capitals on the interior. Prominent and finely designed three-tiered brackets are used to support the eave around the Mahal-i Ilahi. The effect of the architecture depends on this formula, which finds its most beautiful expression in Mughal architecture.

Monolithic struts or serpentine brackets were used on the façades to support extremely broad and slanting eaves. The struts are made of red sandstone in the Stonecutters' Mosque and of white marble in the tomb of Shaikh Salim ad-Din Chishti, where they are S-shaped and so delicately wrought that they excel their wooden prototypes. In addition to providing support, they ornament the façade and lend individuality to the structure. Even without a superstructure, the vertical lines of pillars, carved arches, and struts, combined with the horizontal lines of the eave with its pleasant shadows and battlemented frieze make an extremely beautiful façade composition. Some of the most prominent buildings of Fatehpur Sikri, such as the Stonecutters' Mosque, the tomb of Shaikh Salim ad-Din Chishti, the Mahal-i Ilahi, Baithak, Panch Mahal and Ekastambha Prasada, owe their beauty to it. It was inspired by the art of Gujarat where it was produced in both stone and wood.[32]

Superstructure

The sloping *khaprel* or tile-roof is a distinctive characteristic of the architecture of Fatehpur Sikri. It is made of a series of corrugated stone slabs shaped like *khaprel* tiles that slope from the frieze to the lintel and are supported on brackets and pillars. It is as much a constituent of the façade as of the superstructure, there being no other surmounting features over the parapet. It was used both to roof verandahs and on the pavilions inside the Elephant Gate, the Kutubkhana adjunct (Turkish

Sultana's House). The verandahs on all four sides of the uppermost pavilion of the Khwabgah, the central pavilion of the Divan-i 'Amm, and the building called Tansen's Barahdari are all roofed in this way. The roof of the Kutubkhana adjunct is carved to look like *khaprel* tile, but the Khwabgah and Divan-i 'Amm pavilion roofs are simply corrugated.

The triangular roofs of the north and south upper pavilions of the Raniwas also have the *khaprel* design[33] covered with blue glazed tile. Polychrome glazed tiles combined with carved stone are a prominent feature of the ornamental scheme at the Man Mandir at Gwalior,[34] and are found in the friezes in the Bengali Mahal in the Agra Fort, but their use to cover an entire roof was an innovation, and provided a pleasing contrast to the carved surfaces of the mainly stone architecture.

The *khaprel* roof is a translation in stone of roofs of village huts made of bamboo, thatch, and baked-clay *khaprel* (Skt. *kharpara*) tiles. They were also used on the roofs of masonry houses as Abu'l Fazl noted: 'Khaprel or tiles: they are one hand long and ten fingers broad, are burnt and are used for roofs of houses, as a protection against heat or cold. Plain ones, 86 dams per thousand, enamelled [i.e. glazed], 30 dams for ten.'[35] The passage shows that both simple and glazed *khaprel* were common and their quality and rates standardised, and this is confirmed by the number of miniature paintings that depict *khaprel* roofs.[36] They are obviously inspired by folk prototypes. The Fatehpur Sikri examples show the ingenuity of the artisans who raised these simple folk elements to the dignity and grandeur of an imperial style, and exemplify how art idioms in India evolved from folk to popular to classical.[37]

The baths of Fatehpur Sikri are roofed by plain hemispherical cupolas without crowning finials. The square four-pillared *chhatris* used to ornament the skyline have either pyramidal or hemispherical roofs with a *mahapadma*-and-*kalasa* finial. Domes, on the other hand, have been used at Fatehpur Sikri very sparingly. Although generally common in Islamic architecture, they were not much favoured by the Fatehpur Sikri builders who obviously preferred the *chhatri*-and-*chhaparkhat* combination.

When it is used, as in the Jami' Masjid, Raniwas, and Mahal-i Ilahi, the dome is a simple hemisphere crowned by a *mahapadma*-and-*kalasa* finial, the traditional crowning elements of Indian temple architecture; an *amalasaraka* also appears between the finials in some cases, for example, the main dome of the Jami' Masjid. They were probably originally covered with glazed tiles. This dome is very different from the earlier Mughal domes of Delhi,[38] for example, on the tomb of Humayun

and the Subz-Burj. It does not have a high neck or drum, and it is neither bulbous nor double. Although its diameter far exceeds its height at the point of springing, a feeble attempt has been made to raise it. It is essentially a Sultanate dome. Surprisingly, however, contemporary miniature paintings depict it as the bulbous onion-shaped double-dome type with a high neck universally used in Mughal painting and inspired by the Central Asian circular domed tent, the *yurt*,[39] known in India as a *qubba*. Whatever inspiration the painters of Akbar derived from the Central Asian dome form, however, was purely academic, for his architects did not use it. The heaviness of the form on the horizontal axis suggests that when Akbar and his builders chose between the *yurt* and the *bitaura* (the circular dome-shaped, closed hut of thatch, used by the local folk to keep fodder and cow-dung cakes), they chose the latter, and adapted it in a grand, dignified, and perfectly stylised way.

The *chhatri* and *chhaparkhat* are the most important constituents of the Fatehpur Sikri superstructure. The four-pillared square *chhatri*, both cupola-roofed and pyramidal, is used in the Jami' Masjid, Raniwas, Ekastambha Prasada, and other buildings. The *chhaparkhat* is an oblong, generally eight-pillared structure with a pyramidal roof.[40] *Chhatris* are used in pairs or series; the *chhaparkhat* is used singly over gateways and *iwans*, or along the whole length of a building, as on the Baithak. Both are invariably crowned by a *mahapadma*-and-*kalasa* finial. The cupola-roofed, four-pillared square *chhatris* and pyramidal eight-pillared oblong *chhaparkhats* made a beautiful combination, harmoniously presenting solids and voids. This superstructure provides both the shade and the silhouette so necessary for aesthetic appreciation against a clear tropical blue sky; it was a novel feature that later became a distinctive characteristic of the Mughal style.

Chhatris were used on both tombs and mosques in the Sultanate period and were a favourite device for ornamentation.[41] The *chhaparkhat*[42] was a more recent innovation. Four-pillared rectangular wooden *raotis* with pyramidal roofs were used around tombstones during the reign of Firuz Shah Tughluq,[43] and wooden *raotis* were also an important structure in the Mughal camp, as Abu' Fazl has recorded.[44] This rectangular wooden form with an ornamental roof was originally derived from the ancient *sibika* or palanquin.[45] The first attempt to give it a form in stone was made at the Man Mandir (*ca.* AD 1500) at Gwalior,[46] but it finds its most beautiful expression at Fatehpur Sikri, and gradually became a distinctive feature of Mughal architecture generally. In contemporary miniature paintings *raotis* are almost invariably depicted on the roofs, along

with the *chhatris*.[47] The motif was later absorbed into the architectural styles of the vassal states and was used as a constituent of the façade composition over the portals. Again a simple folk element, this time of the Jamuna–Chambal region, went into the making of imperial art.[48]

Two factors determined Fatehpur Sikri's architectural style. The first was the influence of the anonymous artisans drawn from the various regions that had been annexed to the Mughal empire, and particularly from the Malwa–Gujarat–Rajasthan and Jamuna–Chambal regions (Delhi, Agra, Fatehpur Sikri, Dholpur, Gwalior). They had been working in various stylistic milieux, and had already absorbed other influences. Such architectural forms as the *catuḥsala* plan, the lantern ceiling, corbelled pendentives, the *bhadraka* pillar, the three-tiered bracket-and-*kalasa* finial owe their origin to the builders of Gujarat; features like the *poli, tibara, duchhatti*, attached *kotha*s, *ladao* and *chhappar* ceilings, *misraka* pillar, ornamental arch compositions, arch-and-lintel entrance, entrance-façade composition, *khaprel* roof, and *chhatri-chhaparkhat* combination belong to the Jamuna–Chambal region.

The second decisive factor was Akbar's own enlightened patronage of the arts: music, painting, and architecture, in consonance with the *mizaj* (temperament) and *tahzib* (culture) of his all-embracing and all-absorbing personality. He had no prejudices and used his initiative and discretion to bring together the best artistic traditions, both indigenous and foreign. He allowed his artisans freedom of expression within the guidelines he set for them, as he did in all the arts. Emancipated from the *sastric* dogma that had left no scope for artistic innovation, they were free to exercise their imagination as well as their skill. This art is a reflection of Akbar's cosmopolitan outlook, as much as it is symbolic of the florescence of Indian art. It is as eclectic in spirit as it is inventive in approach. Under Akbar's patronage, the emphasis shifted from religious to purely artistic considerations, and from folk to courtly, as it ultimately provided models for the construction of residential buildings from Kashmir to Daulatabad and Ahmedabad to Dhaka. Its vocabulary came from various sources which it absorbed, refined, and evolved to create an ideal repertory for later building in India, where it became a classical style.

This region could not have produced this architectural style in any other age or under any other regime, nor could Akbar have achieved such wonderful results in any other region or with any other set of builders. It is the cumulative result of Akbar's personality combined with the cultural legacy of the region and the builders who worked at Fatehpur Sikri. It represents a compromise between ancient theory and medieval practice, wooden forms and stone replicas, classical ideals and folk art, foreign inspiration and indigenous adaptation, and an imperial sovereign and the common people.

Notes and References

1. For a general introduction, see my *History of Mughal Architecture*, vol. 2 (New Delhi, 1995). Arabic, Persian, Sanskrit, Hindi, and English technical architectural terms are explained in my *Jharokha: An Illustrated Glossary of Indo-Muslim Architecture* (Jaipur, 1986).
2. *Muntakhab at-Tavarikh*, vol. 2, trans. W.H. Lowe (Delhi, 1973), pp. 279–80.
3. Ibid., p. 316. Badauni gives the date of this order in the chronogram: 'Fasad-i Fazl' (= AD 995/AD 1587). He noted: 'Even the letters which were peculiar to the Arabic language as *swad, dwad, hai, ain, the* (se), and *zoy* were avoided . . .' Two verses from the *Shahnama* that Firdausi of Tus gives as part of a story, were frequently quoted at court:

   Through the eating of the milk of camels and lizards.
   The Arabs have made such progress;
   That they now wish to get hold of the Kingdom of Persia
   Fie upon Fate! Fie upon Fate!
   (ibid., pp. 316–17).
4. *Muntakhab*, vol. 2, p. 265.
5. *A'in-i Akbari*, vol. 1, trans. H. Blochmann (Delhi, 1965), pp. 30–1.
6. Ibid., p. 52.
7. Ibid., pp. 55–6.
8. Ibid., p. 96.
9. Jalali was obviously derived from Akbar's first name, Jalal ad-Din, which is also the source of salutation under Akbar's Din-i Ilahi: 'Allah-o-Akbar', 'jalle-jalal-hu'. That he did not care for the concept of *Dar al-Islam* (the World of Islam) and thought only in terms of India and Indian culture is again shown by an episode recorded by no less an eyewitness than Badauni: 'His Majesty [Akbar] had now determined publicly to use the formula: "There is no God but God, and Akbar is God's Representative" [*La ilaha illilah, Muhammad Akbar rasul-Allah; Allo-Rasul Mahamad Akbarasya Allo-Allam illallaiti illillah* in the Sanskritised form of the *Allopanisad*, vide Nath, *History*, vol. 2, pp. 29–36]. But as this led to commotions, he thought better of it and restricted the use of the formula to a few people in the harem. The Emperor tried hard to convert Qutb ad-Din Muhammad Khan and Shahbaz Khan. But they staunchly objected. Qutb ad-Din Khan said: "What would the kings of the West say, such as the Sultan of Constantinople, if they heard all this? For they all hold the same faith, be it a travesty or no." His Majesty then asked him if he was in India on a secret mission from Constantinople [i.e., was he an agent?], as he showed so much

opposition; or if he wished to keep a small place warm for himself should he go away from India and become an honoured guest there. He might go at once. Shahbaz got excited, and took part in the conversation and when Bir Bal—that hellish dog—attacked the faith, he said to him: "You cursed infidel, will you go on talking in this manner, until I am able to pay you out!" Affairs became rather unpleasant, and the Emperor said to Shahbaz in particular, and to others in general: "Would that they would beat your mouths with a slipper full of filth?" ' [which in medieval times was considered to be the most humiliating punishment, see *Muntakhab*, vol. 2, pp. 269, 281–2].

10. As Barani reveals in the *Fatwa-i Jahandari*, ed. and trans. Muhammad Habib and Asfar Begum, *The Political Theory of the Delhi Sultanate* (Allahabad, n.d.).
11. *Muntakhab*, vol. 2, p. 265.
12. A'in 85, *A'in-i Akbari*, vol. 1, p. 232.
13. Abu'l Fazl notes this whenever he mentions an architectural project; for example, of the construction of the Agra Fort, which began in AD 1565, he says, 'He at this time gave directions for the building in Agra of a great fortress such as might be worthy thereof and correspond to the dignity of his dominions' *Akbarnama*, vol. 2, trans. H. Beveridge (Delhi, 1962), pp. 372–3.
14. *A'in i Akbari*, vol. 1, p. 232.
15. Ibid., pp. 232–7, entitled 'The Prices of Building Material, etc.', 'On the Wage of Labourers', and 'On Estimates of House Building', respectively.
16. See Nath, *History*, vol. 1, pp. 104–5.
17. *Samarangana-Sutradhara*, ed. V.S. Agarwala, Gaekwad Oriental Series, no. 25 (Baroda, 1966); *Parimana-Manjari*, ed. and trans. into Gujarati. (Ahmedabad, 1968), deals with domestic wooden architecture; *Silpa-Dipaka*, ed. and trans. into Gujarati (Ahmedabad, 1970) deals with both stone and wooden civil architecture; *Raja-Vallabha*, ed. and trans. into Gujarati (Ahmedabad, 1965).
18. As court historian Abu'l Fazl tells us in *Akbarnama*, vol. 2, pp. 530–1, specifically in the *A'in-i Akbari*, vol. 2, pp. 180–1.
19. Popularly known as Jodh Bai's Palace, Birbal's House, and Maryam az-Zamani's House, respectively.
20. Erroneously referred to as the horse stables and camel stables.
21. E.g., *Silpa-Dipaka*, vol. 1, p. 20.
22. Abu'l Fazl describes the Mughal camp and its paraphernalia in A'in 16, 'The Encampment of Journeys'; A'in 17, 'The Encampment of the Army'; and A'in 21, 'The *Farrashkhana*'; see *A'in-i Akbari*, vol. 1, pp. 47–50, 55–7, but remarks that it is difficult to describe a large encampment and that he will restrict himself to the equipage used for hunting parties and short journeys. The Mughal camp was faithfully depicted in a number of Mughal paintings (see *n.* 39 infra).
23. Abu'l Fazl noted that the monthly pay ranged from Rs 6 down to Rs 2 and 10 *dams* (240 to 130 *dams*); cf. *A'in-i Akbari*, vol. 1, p. 49.
24. I do not agree with S.A.A. Rizvi, 'Town Planning at Fatehpur Sikri', Seminar on Fatehpur Sikri, 2 December 1972, who found the planning of Fatehpur Sikri identical to that of an imperial encampment 'which in effect reproduced a town in canvas'. Camps were set up along a single axis, and all the main tents were oriented in the same way; this is not the case at Fatehpur Sikri. A camp also had no drainage or water-supply problems that would affect the layout of the structures, while they would have been a prime consideration at Fatehpur Sikri. The Mughal encampment was no doubt a source of inspiration for the planning of Fatehpur Sikri, particularly with respect to purdah and security, but the occupation of a temporary level site by wood, canvas, and cloth tents and the construction of permanent stone buildings on a hilltop are two altogether different ventures governed by altogether different principles and techniques.

25. They are different from the clerestories found in Ahmedabad mosques, which provided ventilation in the *liwan*.
26. The following table gives my proposed new nomenclature for the main buildings:

Popular Name	*Proposed Name*
Jodh Bai's Palace	Raniwas
Birbal's House	Mahal-i Ilahi
Horse stables	Shahi Bazaar
Camel stables	Mina Bazaar
Maryam's House	Baithak
Ankh Michauli	Divan-i Khass
Divan-i Khass	Ekastambha Prasada
Turkish Sultana's House	Shahi Kutubkhana adjunct
Turkish Sultana's Hammam	Shahi Hammam
Hakim's Hammam	Khass Hammam

27. Three in the Jami' Masjid, one each on the tomb of Shaikh Salim ad-Din Chishti and Islam Khan, and two and four respectively on the upper-storey rooms of the Mahal-i Ilahi and Raniwas.
28. Nath, *History*, vol. 1, plate 48 (Ceiling of Hall I).
29. Ibid., plate 26 (Ceiling of Hall I).
30. Referred to by Abu'l Fazl in *A'in-i Akbari*, vol. 1, pp. 47, 57: 'The *saraparda* was made in former times of coarse canvas, but His Majesty has now caused it to be made of carpeting and thereby improved its appearance and usefulness.'
31. Nath, *History*, vol. 1, p. 283.
32. Treatment of the wall surface led the builders to evolve a number of forms, e.g., internal bracketing, panelling and use of sunk alcoves, semi-soffits with stalactites, *torana* niches, framed (foiled) niches, and blind ornamental arches with fringe and *jali* screens.
33. The small pavilion of the Mahal-i Ilahi has a sloping triangular roof exactly like a village hut, as do the upper pavilions of Fayzi's house. But though the technique of construction is the same, the slabs are plain.
34. Nath, *History*, vol. 1, pp. 45–6.
35. *A'in-i Akbari* vol. 1, p. 234. A'in 86 (40 *dams* = 1 rupee).
36. E.g., Milo C. Beach, *The Imperial Image: Paintings for the Mughal Court* (Washington, D.C., 1981), plate 15 a on p. 136, depicts a scene from the *Ramayana*, painting *ca.* 1587–98 by Manda, who worked for 'Abd ar Rahim Khan-i Khanan. It shows a pavilion, with a sloping *khaprel* roof

37. This process can be seen in the names of jewellery, for example, as Coomaraswamy noted: 'Those of special flowers and fruits, or generic terms for flowers and seeds, as "rui-flower thread"; and "hair flower". These names are reminiscent of the garlands of real flowers, and the flowers in the hair that play so important a part in Indian festal dress. Those with the flowers and fruits worn as talisman or as religious symbols are prototypes of the flower forms of Indian jewellery, which thus, like all other Indian art, reflects the thought, the life, and the history of the people by and for whom it is so beautifully made'; A.K. Coomaraswamy, 'The Aims of Indian Art', in *idem, Fundamentals of Indian Art*, vol. 1 (Jaipur, 1985), pp. 12–13.
38. For details, see Nath, *History*, vol. 1, pp. 201–10.
39. A circular domed tent of skins or felt stretched over a collapsible lattice framework; the *yurt* was used by Central Asian nomads as a dwelling and was the prototype for the Central Asian bulbous or cylindrical dome. This dome form is depicted in the miniatures of the *Tutinama* painted in the early years of Akbar's reign. See *Tutinama* (*Codices selecti*, Facsimile, vol. 55), Cleveland Museum of Art (Graz, 1976), plates on pp. 10v, 63v, 68v, 175v, 179v, for the clearest examples; 209v, 234r, 242r show others. The painting entitled *Krishna and the Golden City of Dwarka*, from the *Harivamsa*, designed by Kesu the Elder and painted by Miskin around AD 1585, also depicts a Central Asian dome with a high neck; see Beach, *Imperial Image*, plate on p. 47. The *Hamzanama* paintings also show these dome forms, e.g., *Hamzanama*, vol. 1 (*Codices selecti*, Facsimile vol. 51/1) (Graz, 1974), plates V6, V7, V33, V41, V52; vol. 2, ibid., vol. 52/2 (Graz, 1982) V and A4, V and A13. That these cylindrical domes were inspired by the *yurt* is shown by some miniatures, e.g., one from a manuscript of Nizami's *Khamsa* done by Mir Sayyid 'Ali, *ca.* 1539–42 (now preserved in the British Museum, Or. 2,265), depicting a camp scene with some tents in the foreground, one of them a *yurt*; and one from a manuscript of Jami's *Baharistan* done by Miskin, *ca.* 1559, showing two similar *qubba*s (round tents of cloth), now preserved in the Bodleian Library, Oxford, Elliot 254, fol. 42), cf. Emmy Wellesz, *Akbar's Religious Thought Reflected in Mogul Painting* (London, 1952), plates 1 and 28, the latter also published in R. Godden, *Gulbadan* (London, 1980), plate on p. 103.
40. For details, see my 'Notice on Firuz Shah's Reference to "Chhaparkhat" in the *Futuhat-i Firuz Shahi*', *Journal of the Asiatic Society*, vol. 21, 1979, pp. 1–12.
41. The builders of Fatehpur Sikri were so fond of this structure that they built a beautiful square *chhatri* independently adjacent to the Divan-i Khass and used in it the typical *vandanamalika*s or *gaja-torana*s of temple architecture in lieu of brackets.
42. A folk word which combines *chhappar* (thatched sloping roof) and *khat* (rectangular charpoy) or *katha* (wood); see Nath, *History*, vol. 1, pp. 42–3.
43. See Nath, 'Notice on Firuz Shah'.
44. *A'in-i Akbari*, vol. 1, pp. 47–50, 55–7.
45. It has been mentioned in the *Amarakosa* (2.8.53, 'Sibika-Yapyayanam'), *Abhidhana Chintamani* and *Halayudha-Kosa* (2.450) as a litter or palanquin borne on men's shoulders. Amaravati sculptures depict these forms (Moti Chandra, *Sarthavaha* [Patna, 1966], p. 235). Jain *agama*s mention *sibika* as a covered palnquin with a superstructure; cf. J.C. Jain, 'Jaina Agam Granthon ki Mahatvapurna Sabda Suchiyan', *Nagari Parcharini Patrika*, vol. 59, nos 3–4 (vs. 2011), p. 301, from the *Bhagwati-Tika*.
46. The Buddhist texts mentioned three types of inner chambers (which were in vogue and were permitted by the Buddha to the Bhiksus), viz. *Sibika-gabbho* (shaped like a palanquin or wagon-vaulted), *nalika-Ogabbho* (barrel-vaulted), and *hammiya-gabbho* (chamber on an upper storey), cf. *Vinaya* texts, trans. from Pali by T.W. Rhys Davis and Hermann Oldenberg, Pt. 3, the *Chullavagga*, 4–12 (Delhi, 1965), Vi. 3.3, p. 173. These were built in wood, bamboo, and thatch.
47. Nath, *History*, vol. 1, pp. 42–3, a fact which was also noticed by the contemporary poet Narayandas in his description of the palace in Gwaliari-Hindi: *Chhaje jharokha rache anupa/Jinhahi ujhahi ujhakite rahe je bhupa/Katachhapar satakhane awase/Kanchan Kalsh manahu kavilasa*. See H.N. Dwivedi and Agarchand Nahta, eds, *Chhitai-Charit* (Gwalior, 1960), p. 16.
48. E.g., the *Tutinama*, plates, 33v (two *chhatri*s and a *chhaparkhat* on the roof), 36v (two *chhaparkhat*s on the superstructure), 46r and 46v (two *chhatri*s and one *chhaparkhat*), 58r (two *chhaparkhat*s), 66r (a *chhaparkhat*) between two *chhatri*s, 68v (*chhaparkhat* on the archway), 154r (superstructure is composed of domes on the side pavilions, *chhatri*s on the sides of the central pavilion, and a *chhaparkhat* in the centre); *Hamzanama*, vol. 1, plates V6 (showing a city gate, superimposed by *chhatri*s on the sides, between which, over the archway, is a pavilion surmounted by a *chhaparkhat*), V23 (four *chhatri*s and three *chhaparkhat*s on the superstructure), V31 (*chhatri*s on the sides and a *chhaparkhat* in the centre on the superstructure of a gateway), V45 (*chhatri*s and *chhaparkhat*); and *Hamzanama*, vol. 2, plates V and A13 (*chhaparkhat* with a Central Asian dome), V and A18 (*chhatri*s and *chhaparkhat*), V and A20 (*chhatri*s and *chhaparkhat* on the superstructure).

CHAPTER IV.2

Indian Art Objects as Loot*

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Let us imagine a graceful bronze image of Dancing Śiva before us. It was perhaps created by a Cola artist in eleventh-centuryTamilnad to be installed in a temple to receive offerings of worship, and to parade around the town in a ceremonial palanquin on festival days. From there, this image might have followed any of several paths to stand before us now in a North American museum. Perhaps it was buried under a banyan tree in the fourteenth century when invading Islamic armies, feared for their iconoclasm, marched through the Kaveri delta on their way to Madurai. It could have been disinterred in the nineteenth century, during British rule, by a Tamil workman on a road crew, who showed it to the civil engineer, who brought it to the attention of the District Collector, who passed it on to the Director of Archaeology. In the twentieth century, perhaps, when an international market developed for such objects, it might have ended up in an auction room, a cosmic dance sold to the highest bidder. Or a government expert on culture might have selected it, after its long hibernation in the basement storehouse of its temple, as an image worthy to travel abroad as an ambassador of independent India in the international diplomatics of travelling exhibitions.

All of us who attend to South Asian art realise that the 'art objects' we admire so much in the Museum of Art or at the Festival of India are there, revealing themselves to us, as the result of a series of disjunctive historical events and processes. Certainly, we recognise that the nameless artists who produced these works were not working with museum display as their goal. Yet here, finally, they are.

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Acts of appropriation, by which objects are removed from the settings for which they were fabricated and placed in new ones, are nothing new in South Asia. We would certainly be wrong to picture Islamic iconoclasm or European commoditisation, however profound their impact, as impinging on a previously static Hindu domain, where all such objects occupied and remained in their own fixed places, recognised and respected by all. To the contrary, if we judge from inscriptions, chronicles, and the objects themselves, certain objects circulated widely and famously in early medieval India.

This article will examine one phase in the circulation of Indian art objects: the appropriation of sculpted images by medieval Indian rulers as political acts. During this period, the worship of divinised images in temples was the central public religious cult of the subcontinent, and temple images were often closely tied to the political order. In the prevailing ideological formations of medieval India, worshippers of Viṣṇu, Śiva, or Durgā considered ruling authority to emanate from the lord of the cosmos downward to the human lords of more limited domains such as empires, kingdoms, territories, or villages. The construction of monumental temples housing images of these divinities, making evident their cosmic sovereignty within the polity of the sponsor, was a way of representing and embodying political accomplishments while locating such attainments within a larger, encompassing divine order.

With divine images already preponderant participants in the medieval system of authoritative relations, it is not surprising that images were often seized publicly by one ruler from another in circumstances of conflict. Alive to the identities and mythic backgrounds of the figures, royal looters dislodged selected images from their customary positions and employed them to articulate political claims in a rhetoric of objects whose principal themes were victory and defeat, autonomy and subjugation, dominance and subordination. Such acts were undertaken in deadly earnest and often had decisive effects for the human actors. For the images, too, there were notable consequences. Captured by new proprietors, relocated in the new surroundings, their identities shifted significantly. Here I wish to explore this medieval political discourse that utilised religious images and its effect on the objects so used.

The Appropriation of Images

When art historians, historians of religion, and others who concern themselves with Indian religious objects think about an image such as our hypothetical Dancing Śiva, we focus our attention most often on the

aesthetic elegance of its form, on the religious meaning of its iconographic composition, or on the social and political context within which it was fabricated. In these matters, we believe, lies the essential significance of the object, the message the artist and other agencies responsible for its composition intended to convey. The subsequent life history of the object we tend to regard as extrinsic, as somehow besides the point. It is as if meaning were fixed once and for all at the moment of creation.

With these tacit assumptions, Indianists have seldom studied the appropriation of art objects in premodern South Asia. The only general treatment that I know of is *Royal Conquests and Cultural Migrations in South India and the Deccan* (1964), by the erudite art historian C. Sivaramamurti. In his wide-ranging survey of the relationship between military campaigns and the transmission of artistic themes and motifs in classical and medieval South Asia, Sivaramamurti paints a portrait of essentially benign artistic exchanges among warring kings, motivated by spontaneous aesthetic appreciation.

> Sometimes a great victor was struck with admiration and adopted what were essential features of the culture of a dynasty long reduced to dust with all its glory forgotten. Sometimes the politically vanquished sovereign had something glorious to give as a lesson of culture to his victor, who, it must be said to his credit, enthusiastically accepted it, though it was really a cultural conquest of the political victor by the vanquished.[1]

Undoubtedly, many medieval South Asian kings did appreciate the artistry of a finely rendered bronze image or an elegant carved pillar, just as they appreciated well-crafted poetry. As prescriptive texts indicate, a young prince's education might well include instruction in the various branches of art and architecture. Kings often participated directly in the construction of religious edifices as ritual patrons, and several substantial texts on the fabrication of temples and images are attributed to royal authorship. However, kings did not regard the appropriation of an image as primarily an expression of aesthetic sensitivity, nor did they recognise the strong division of 'political' and 'cultural' domains implicit in Sivaramamurti's account. In almost all inscriptions and narrative accounts dealing with the matter, expropriations are treated as predominantly political acts. Such actions were not benign but were highly consequential, not only for the development of art, but for the subsequent course of political events as well.

To gain a preliminary idea of the value attached to image appropriations, let us consider the case of the pure-gold Buddha image of the

Jewel Palace in Anurādhapura, seized by the Pāṇḍyans in the ninth century and regained by the Sinhalese king Sena II. The events are narrated by the Buddhist monk and chronicler Dhammakitti in the *Cūlavaṃsa*.[2]

In the early ninth century, the Pāṇḍyan kingdom of southern Tamilnad expanded northward into the Kaveri and Kongu regions, and sometimes around 835 the Pāṇḍyan ruler Śrīmāra Śrīvallabha (r. AD 815–62), filled with imperial ambitions, mounted an invasion of the island of Sri Lanka. The Sinhala king Sena I (r. AD 831–51) attempted to resist, but the Pāṇḍyan attack proved too formidable.

> In an instant the great army of the Pāṇḍyan king swept over the large crowd of Sinhala soldiers and crushed them, moving like Māra's army. And the Sinhala king, hearing that his army had been sundered, took up all his portable wealth and fled the city, heading towards the mountains.[3]

With the Sinhalese army dispersed and leaderless, Śrīmāra (like his namesake Māra, deadly to the Buddhists) easily captured the capital and began to plunder it.

> He removed all the valuables from the royal treasury, and seized everything that could be seized in the monastery and the city. The statue of the Teacher made entirely of gold in the Jewel Palace, the pair of jewels set as eyes in the Lord of Sages made of stone, likewise the gold plate on the *caitya* in the Thūpārāma, and the golden images in the various monasteries—all these he seized, denuding Lanka island of its wealth and spitting out the once-splendid city as if demons (*yakṣas*) had devoured it.[4]

The solid-gold Buddha was not an ancient image. It had been made about fifty years earlier, sponsored by King Mahinda II (r. 772–92) at the steep cost of 60,000 copper coins, and established on a pedestal in the Jewel Palace, a pavilion constructed by Mahinda in the Abhayagiri monastic complex.[5] Mahinda's grandson, Aggabodhi VIII (r. AD 801–12), honoured the image with a grand festival as part of his accession to kingship.[6] The sumptuous image was evidently one of considerable importance not only to the Abhayagiri monks who maintained it but also to the Sinhalese rulers of the period.

Back on the mainland, the Pallavas were organising a coalition of forces to oppose the upstart Pāṇḍyans, and this undoubtedly made Śrīmāra more eager to come to terms with his defeated opponent. From exile, Sena I was able to negotiate a settlement with the occupying power, giving elephants and all his jewels to Śrīmāra. The Pandyan king left the island with his booty and tribute. Sena I returned to the capital

and took up sovereignty once again, but sovereignty of a decidedly diminished stature.

When Sena I died, his nephew, Sena II (r. AD 851–85), became ruler. The new king ruled without incident, Dhammakitti relates, until the day he held a festival for the Tooth-relic:

> Once when the king was celebrating the great festival of the Tooth-relic with all proper offerings, he ascended the excellent Jewel Palace, and there saw the empty pedestal where the golden Buddha had once stood. 'Why is this?' he asked.
>
> 'Does the king not know?' replied the ministers. 'During the time of your uncle, King Sena, my lord, the Pāṇḍyan king came here, laid waste to the island, and left, taking all that had become valuable to us.'
>
> When the king heard this, he was ashamed as if it were he himself who had been defeated. And that very day he ordered the ministers to assemble his troops.[7]

A disgruntled Pāṇḍyan prince, apparently a passed-over claimant to the throne, had conveniently appeared in Lanka requesting aid, and Sena II saw in him an opportunity to redress his grievance. The Sinhala king sent an expeditionary force to accompany the prince and support his claim to rule in Madurai, the Pāṇḍyan capital. 'Go!' he ordered his commander, Kuṭṭaka, 'Kill the Pāṇḍyan king! Bring back all the jewels he once took from here! Grant sovereignty to this prince, and return quickly!'[8]

Meanwhile, the Pāṇḍyan armies had been engaged with the Pallava-led coalition, fighting three costly battles. When the Sinhalese armies attacked from the other flank and marched on Madurai, the Pāṇḍyans were unable to resist. Śrīmāra died shortly after of wounds sustained in battle.

> Then the Sinhalese armies fearlessly entered the city and plundered the place completely, like gods sacking the city of the demons. The commander inspected the treasury in the royal palace, and took all the valuables that had been taken from our island, as well as those found in the town and the countryside.[9]

A good patriot, Dhammakitti compares pillage done by others to the work of Māra's army and demons; when it is done by his own countrymen, however, it is as if gods plundered demons.

Kuṭṭaka had the Pāṇḍyan prince crowned as King Varaguṇavarman II and, after a brief tour, returned to Lanka, where Sena II received the victorious army with rejoicing and rituals of solidarity. The king held a great feast for them in the capital, celebrated a festival of victory, and distributed gifts to the poor. The repatriated objects he conscientiously restored to their proper places.

> Without attachment he placed all the valuables in their original places on the island, and he ritually established the golden images just as they had been before. He filled the empty pedestal of the Teacher in the Jewel Palace, and he secured the land by setting up guardposts.[10]

The restoration of images had remarkable effects on the community, for from that time on, Lanka became as prosperous as Uttarakuru, the legendary land of plenty beyond the Himālaya.

In this simple moral tale of treasure lost and recaptured, we begin to see more clearly how medieval kings and their advisers regarded the expropriation of images. The stolen image, disclosed to the young king by its empty pedestal, serves as an objectification of defeat not only for his uncle, who had suffered the loss, but for the very institution of Sinhala sovereignty. The humiliation that the king feels and his immediate resolve to retrieve the golden Buddha indicate how powerfully the empty pedestal provoked him, how clearly he understood its message in this discourse of objects. His orders to Kuṭṭaka and the commander's careful search in the royal treasury at Madurai confirm that recovery of the missing images was a central purpose of the invasion, and the jubilation upon their successful return is in the narrator's eyes a celebration of the restoration of the country's wholeness. For Dhammakitti, whose principal concern throughout the *Cūlavaṃsa* is to delineate proper relations between Sinhalese sovereignty and the Buddhist community, loss and recovery of the golden Buddha is a synecdoche for the integrity of the Sinhalese polity itself.

Loot: Morality and Motivation

In their inscriptions, medieval Indian rulers proudly and repeatedly proclaim their expropriation of objects from other kings. Here, for instance, is the epigraphic account of a Cola king's victory over a Cālukya opponent at the battle of Kūṭalcaṅkamam:

> Vīrarājendra halted his hot, impetuous elephant and donned the garland of victory. He plucked out his opponent's wives, the family treasure, his conches, his fringed white parasol, his trumpets, his war-drum, his canopy, his white yak-tail fans, the banner of the boar, the crocodile gateway, 'Blossom' the female elephant, a herd of war-elephants, and a troop of prancing

horses. Amidst shouts of praise, he put on the victory crown adorned with splendid red jewels.[11]

Not only does Vīrarājendra (AD 1063–9) 'pluck' his defeated enemy of these properties, he also places them on display in the capital for his subjects to view:

Seated on a throne of bright jewels, Vīrarājendra exhibited in orderly rows the great heaps of treasures he had seized in the Vengi territory, while all the kings on earth did homage at his feet and praised him.[12]

There is nothing furtive about all this. Just as the subordinate rulers bowing at Vīrarājendra's feet visibly signify their acceptance of his overlordship, the orderly exhibition of Cālukyan treasures is meant to represent objectively to all observers Vīrarājendra's battlefield victory. Looting, in medieval South Asia, was an important element in the rhetoric of kingship.

The forcible expropriation of valued objects from another defined as an enemy in circumstances of military conflict, which we designate by the Anglo-Indian term 'looting', is a long standing practice in many cultures, of course.[13] However, this activity may be constructed and construed differently in different times and places. We in the modern West have come to regard looting as a species of theft, a side effect of war that is predatory, disorganised, and motivated by economic gain.

Indians of the medieval period, by contrast, did not consider such seizure as theft, nor did they necessarily conduct it in a disorderly and surreptitious fashion. As the inscriptions of Vīrarājendra suggest,, medieval South Asian rulers and their retinues carried out plunder as a normal and public aspect of war, organised by and around the person of the king, and directed as much toward symbolic objects as toward economic resources. To consider more closely the cultural construction of such wartime appropriations, let us begin with the *dharmaśāstra* of Manu and his ninth-century Kashmiri commentator, Medhātithi.[14]

In his discussion of proper royal conduct, Manu is concerned to circumscribe battlefield behaviour within a code of chivalrous conduct. Manu sets down prescriptions concerning whom a warrior may strike, when he may strike him, what weapons he may use, and much more. While urging discipline upon the troops in many respects, Manu indicates no similar compunction about the propriety of plunder.

Chariots, horses, parasols, money, grain, cattle, women, all kinds of goods, and base metals all belong to the one who wins (*jayati*) them.[15]

It is a matter of 'victory,' not of theft.

The moral question for Manu is not whether one may expropriate objects (and living property as well) from defeated opponents, but how one should properly distribute the booty. Certain valuable commodities, such as gold, silver, and land are reserved for the king alone, Medhātithi tells us. This includes, as we will see, all regalia and images. It is impermissible, however, for the king as master (*svāmin*) to appropriate all loot for himself. Other items—those listed in Manu's verse—belong to the individual warriors who acquire them. But here, too, a portion (and, Medhātithi specifies, the best portion) must be presented to the king: 'One should give a share to the king. So it is stated in the Veda'.[16] The king occupies the centre of all looting transactions. Sharing the spoils reiterates substantively the moral relationship between king and troops.

The Vedic precedent to which Manu refers is none other than the primordial battle between Indra, king of the gods, and the demon Vṛtra. When Indra defeated the demon in combat and so became great, he requested and received the best portion of all the loot obtained.[17] As Indra among the gods, so, too, the king among his subordinates is entitled to the choice part of every expropriation. By sharing loot hierarchically, Manu suggests, Hindu rulers should attempt to replicate in human society the model set by the Vedic gods.

Medhātithi records an additional provision concerning spoils gained by the king himself and those acquired by the army as a collectivity. Of such loot, he tells us, 'the king should distribute it among those he supports according to the principle of "bestowing acquisitions on a worthy recipient" '.[18] This principle, Medhātithi explains elsewhere, means that a king should apportion out his acquisitions to such 'worthy recipients' as gods, hermitages, intellectuals, moral exemplars, and others of that ilk. He also may employ his resources in sponsoring public festivals.[19] By that same principle, we often learn through inscriptions of looted objects presented to temple deities and to those who served the king in battle. Booty engenders those substantive transactions that link the king both with the god or gods whose cosmic sovereignty includes and surpasses his own and also with eminent subjects within his own dominion.

Far from eschewing wartime appropriations, then, medieval Hindu rulers place themselves forthrightly in the centre of a redistributive network involving expropriated objects. Not surprisingly, this is closely linked to the medieval Hindu ideology of royal authority, which views the king as the central agency responsible for integrating the dispersed segments of his domain into a unitary polity and bringing about its prosperity. By seizing objects during military campaigns, he embodies

the victory he has attained over his rivals, symbolically incorporating their signs, and by reapportioning those objects within his own domain he replenishes it and reiterates the ties that bind together the dominion of which he is the moral centre.

Appropriated Images and Secondary Signs

The appropriation of Indian images recasts their significance without altering what they are and fundamentally represent. To clarify this point, it is useful to keep in mind Roland Barthes's well-known model of mythology as a second-order semiological system.[20] Here, the first order sign system consists not of language but of physical objects—in most cases, sculpted objects that represent something according to known conventions and also may serve as the embodiment of that something. The golden Buddha image, as signifier, evokes immediately in its viewers the concept of 'Buddha-as-Teacher', the signified. Their associate unity, drawn even more closely when the Buddha is ritually invoked into the image, constitutes the sign. It is this first-order pairing of image and signified concept (or divinity) that we refer to when we 'identify' an Indian image iconographically. When seized by the Pāṇḍyan king, however, the signification of the golden Buddha shifts, as Barthes would have it, sideways. The appropriated image in its new situation now serves as the signifier also of the military victory of the Pāṇḍyan ruler over the Sinhalese. It has not lost its previous identity, but a secondary signification augments it.

This enhancement of identity may be asserted explicitly, as in the case of a Cālukyan door-guardian looted by the Cola king Rājādhirāja (r. AD 1018–54), where details of its origin and seizure have been inscribed onto the object itself: 'This is the door-guardian brought by Lord Vijayarājendradeva after burning Kalyāṇapuram.' The source of the looted image may become a permanent part of its name. The 'Vātāpi Gaṇapati' at Tiruccenkāṭṭāṅkuṭi, for instance, denotes the image of Gaṇeśa brought to Tamilnad by the Pallava ruler Narasimhavarman I (r. AD 630–68), after sacking the Cālukyan capital of Vātāpi in AD 642.[21] Images may even carry with them entire pedigrees of previous proprietors and appropriators. In the Lakṣmaṇa temple of Khajurāho, constructed by the Candella ruler Yaśovarman shortly before AD 950 to house a solid-gold image of Viṣṇu Vaikuṇṭha, the foundation inscription traces the background of the image.

> The lord of the Tibetans got it from Mount Kailāsa, and then Sahi the king of Kangra received it from him out of friendship. With his troops of elephants and horses, Herambapāla (Pratihāra) thereupon seized it from him. Obtaining it from his son, the (Pratihāra) prince Devapāla, the illustrious (Candella) king Yaśovarman—an ornament among kings and a crusher of enemies—performed the ritual establishment of Vaikuṇṭha.[22]

From 'Kailāsa' (Kashmir?) to Tibet to Kangra to Kanyakubja to Khajurāho: these past journeys of this eminent Viṣṇu image are carefully recorded as indicative and constitutive of its identity and value.

Appropriated images are, nevertheless, still also divine images. The object may be removed from its original and intended situation, but this does not empty it of its previous significance as a fabricated icon that may, under proper ritual conditions, serve as an embodiment for a god or goddess. Looted images are, therefore, worthy of respectful treatment from their new proprietors, and for the most part during this period they did receive it. We do not hear of the intentional defilement of divine images nor, very often, of their public mutilation by those who seize them.

Often the looters made considerable effort to erect new temples for housing plundered images in the manner that befitted their significance. One of the most notable practitioners of royal appropriation was the Vijayanagar emperor Kṛṣṇadevaraya (r. AD 1509–29). Shortly after assuming the throne, the emperor attacked the forces of the Gajapati ruler Pratāparudra at Udayagiri, a hill stronghold in Andhra Pradesh. After a bitter siege lasting some eighteen months, the fortress fell, paving the way for further victories over the Gajapatis and leading finally to Pratāparudra's acceptance of Vijayanagar suzerainty.

The victory at Udayagiri was celebrated as a momentous event, and as part of the celebrations Kṛṣṇadevarya had transported back to his capital an image of Bālakṛṣṇa from a small temple at Udayagiri.[23] It was a modest figure, just over three feet tall with its pedestal. Carved in the greenish black granite typical of the Udayagiri area, it portrayed Kṛṣṇa as a chubby boy seated with his right foot on a lotus flower and holding a butter-ball. To house the looted image, the emperor had specially constructed the Kṛṣṇasvāmi temple, resembling in plan and design the Udayagiri temple from which the image had been removed. At its consecration ceremony, the king presented gold and silver vessels to the Udayagiri Bālakṛṣṇa and endowed it with the royal share from nine villages for maintaining regular daily worship on a suitable scale.[24] Vyāsarāya, a favoured intellectual of the royal court, composed a series of hymns to honour the advent of this image in Vijayanagar.[25] Evidently,

Bālakṛṣṇa was treated as a valued and honoured guest by his new dynastic hosts.

There is good reason to suppose that another Vijayanagar monument of Kṛṣṇadevaraya's time, the Viṭṭhalasvāmi temple, also housed a looted image. Viṭṭhala is a form of Viṣṇu-Kṛṣṇa worshipped almost exclusively in Maharashtra, and his cult is centred at Pandharpur. In 1520 and 1521, Kṛṣṇadevaraya led a successful campaign against Isma'il 'Ādil Shāh, Sulṭān of Bijapur, bringing him temporary control over the Pandharpur area. Considerable evidence suggests that the Vijayanagar ruler took the image of Viṭṭhala from its cult centre and brought it back to the capital to animate his own Viṭṭhala temple, which was then under construction.[26]

For Kṛṣṇadevaraya, the appropriation of such images does not appear to have been simply a matter of personal religious predilection or of offering refuge from the threat of Islamic iconoclasm to gods of other regions.[27] Rather, I would argue, it was part of a ritually incorporative imperial policy, requiring the conspicuous, ceremonial presence of subordinated polities in the capital. As Burton Stein has argued, during Navarātri, the principal royal festival of Vijayanagar, the feudatory 'chiefs' were obliged to participate in a series of hierarchicised transactions with their overlord, enacting and reconstituting annually their subordinate share in Vijayanagar sovereignty.[28] Divinities of the subject regions likewise made yearly treks to attend the ceremonies, along with retinues of priests and temple dancers, who arrived in great 'triumphal cars'. While the human servants of these divinities made obeisance to the Vijayanagar emperor and danced for him, the images themselves expressed homage to the presiding deity of the festival, an image of the goddess Durgā, slayer of the Buffalo-demon.

The more permanent presence of the Udayagiri Bālakṛṣṇa in Vijayanagar conveyed much the same message as the visiting deities of Navarātri. Transported to the capital and housed in its own temple, it spoke, not only of the glorious child-god Kṛṣṇa, who received the homage of Kṛṣṇadevaraya and his retinue, but also of the encompassing of Gajapati polity within the overarching imperial lordship of the Vijayanagar sovereign.

Homologies for Defeated Kings

Barthes's model of second-order semiological system may also help account for the choice of particular objects or images as loot. The most

common target for royal appropriation in medieval India, according to inscriptions, was regalia, a repertoire of objects closely associated with the king's person and his capacity to rule—banners, yak-tail fans, umbrellas, crowns, sceptres, musical instruments, and gateways. With such synecdochic objects, the choice was rather simple. Since they were clearly and unequivocally associated with the king through an ongoing series of royal ceremonials, they presented obvious targets for seizure. But divine images are more complex objects than other items of regalia, and similarly, the semiotic value of their appropriation was more complicated.

One might expect (as I initially did) that a conquering king would direct himself toward the most important images of a defeated kingdom. What more powerful way to proclaim dominance than to appropriate the pre-eminent deity of the vanquished. There are certainly cases where this expectation is borne out, such as the seizure of the Sinhalese Golden Buddha by the Pāṇḍyans. Not only was this image closely associated with Sinhalese royalty, but it also acted as an apt signifier for a polity that strongly supported the Buddhist Sangha as the primary religious group in its domain.

Just as often, however, this does not happen. Consider, for example, the perplexing choice of a stone door-guardian from Kalyāṇī as a target for appropriation by the Cola king Rājādhirāja.[29] In 1045, Rājādhirāja waged war against his Cālukya foes led by Someśvara I (r. AD 1042–68), routed the enemy forces at the battle of Pūṇṭūr, forced Someśvara to flee, and then continued north to burn the Cālukya capital of Kalyāṇī. To add ritual insult to injury, he there performed a Heroic Consecration ceremony and assumed the new royal title of Vijayarājendra, the Victorious Rājendra. Returning from this successful campaign, Rājādhirāja transported a massive black stone door-guardian nearly 500 miles to his own capital of Gaṅgaikoṇḍacolapuram, where he displayed it as a trophy of war and had it incised with an identifying inscription stating that he had seized it when burning the Cālukya capital (Fig. 1).

Now, if Rājādhirāja plundered and burned Kalyāṇī, he presumably had his pick of a great number of Cālukya images. He could perhaps have taken an image of Viṣṇu in his Boar incarnation, which was the particular insignia of the Cālukya dynasty. To save Earth from sinking into the ocean, Viṣṇu had once embodied himself as a powerful Boar, dove into the depths, and raised Earth on his giant snout. The Cālukyas, emulating the earlier Gupta dynasty, adopted this form of Viṣṇu for special attention, seeking to re-enact the Boar's mythical deed through

their own Earth-saving dynastic mission. Yet Rājādhirāja contented himself with an image of clearly inferior status within the temple hierarchy. Door-guardians were divine henchmen, stationed at the entrances to temples, whose business it was to prevent demons and enemies from approaching the inner sanctum and to pay homage to the supreme lord within, thereby enacting and displaying their own subordinate position.

To comprehend Rājādhirāja's choice, it is first necessary to recognise that it alluded to a historical precedent, Dantidurga's famous 'Golden Womb' (*hiraṇyagarbha*) ceremony at Ujjain. The first autonomous ruler of the Rāṣṭrakūṭa dynasty, Dantidurga (r. *c.* AD 742–56) gained independence from Lalitāditya of Kashmir and commenced a 'conquest of the directions' (*digvijaya*), which brought him into conflict with the Gurjāra-Pratihāra king, Nāgabhaṭa I, who ruled over the Malwa region. Dantidurga was victorious in the ensuing battle. He occupied the Gurjāra capital, Ujjain, and there performed a royal gift-giving ceremony, the Golden Womb ritual. As one inscription relates it, 'When he directed warriors to perform the Golden Womb ceremony in Ujjain, Dantidurga made the Gurjāra ruler and other kings serve as his door-keepers (*pratihāra*).[30] Clearly, the Rāṣṭrakūṭa king was here making a powerful ritual statement of political subjugation, forcing a defeated opponent to act in a lowly capacity in a royal gift-giving ceremony, in his own capital to boot. Subsequently, Dantidurga went on to defeat the Cālukyas of Vātāpi (from whom the later Cālukyas of Kalyāṇī claimed descent), and the Rāṣṭrakūṭas replaced them for the next two centuries as the pre-eminent power of the Deccan.

The Cola kings of the eleventh century were acutely aware of the Rāṣṭrakūṭas. For one thing, the Rāṣṭrakūṭas had in the mid-tenth century dealt the Colas a humiliating defeat at the battle of Takkolam and had occupied Cola territory for several decades thereafter. More important, the Rāṣṭrakūṭas had been for almost two centuries the 'supreme overlords' of the subcontinent, and the Cola kings Rājaraja I and Rājendra I—Rājādhirāja's grandfather and father, respectively—aspired to supersede them as the major imperial power of India. After two victorious 'conquests of the directions', they had largely accomplished this. As a culmination of the Cola rise to pre-eminence, Rājendra mounted a grand northern progress to the Ganges River, which he had possessed and transported to his own new capital—all of this replicating an earlier raid on the Ganges perpetrated by the Rāṣṭrakūṭas. (I will discuss the seizing of Gaṅgā below.)

So, too, Rājādhirāja looked to Rāṣṭrakūṭa precedents in his political rhetoric. His appropriation of a door-guardian from the later Cālukyas re-enacted Dantidurga's ritual demotion of the Gurjāra king during the Golden Womb ceremony in a less personal and less compelling but more permanent manner. Mimicking the earlier conqueror of the Cālukyas, Rājādhirāja also performed a royal ritual in the capital of the defeated king—in this case, a Heroic Consecration. Unable to force his rival to take on the role of ceremonial doorkeeper in person, since Someśvara had successfully fled, Rājādhirāja seized a stone door-guardian instead and transported it back to the Cola country.

The parallelism of door-guardian and Cālukya king went further still: both had failed in their primary responsibility. The hapless door-guardian had been unable to stop the destruction of its temple, and likewise Someśvara had failed to prevent the Cola armies from entering and destroying his capital. Waiting in attendance at the Cola capital, the looted Cālukya door-guardian could act as a permanent visible homologue of the subjugated Cālukya ruler. It was a taunting display, to be sure, and, not surprisingly, Someśvara returned from exile to avenge his humiliation by killing Rājādhirāja at the battle of Koppam.

Redistribution: The Emerald Pedestal

Not only does the seizing of objects from opponents in war convey political messages, so, too, does the subsequent redistributing of those objects. If an image forcibly taken from an unwilling opponent and repositioned in one's own capital can serve as a figurative incorporation of that opponent's polity, then by the same token an image accepted willingly by a subordinate ruler from his overlord may signify a subjugation voluntarily accepted. The operative principle in such cases is Manu's phrase, 'bestowing acquisitions on worthy recipients'.

Within the system of loot distribution described by Manu and Medhatithi, as we have seen, all important appropriated objects reverted to the king, who then 'bestowed' them as warranted. The 'worthy recipient' that he chose to favour might be, first and foremost, the god he worshipped as his own lord. So when the Kalacuri king Lakṣmaṇarāja II, ruling in the Dāhala region of Madhya Pradesh, undertook in the tenth century a western military campaign, he pointedly made a pilgrimage to the famous Śiva temple of Somanātha on the Gujarati coast and there 'presented in reverence to Śiva an image of Kāliya [presumably Kaliyavadha Kṛṣṇa] made of jewels and gold', which he had taken in an earlier battle with the king of Orissa on the east coast.[31]

Alternatively, a king might choose human subordinates as worthy recipients for looted images, not as an act of devotion to a superior but as one of favour or grace to an inferior. To consider the political semantics of such a gift, let us take the case of an 'Emerald Pedestal' (*marakatapītām*) employed as a central ritual object in an impressive performance of Navarātri in Ramanathapuram in the year 1892.[32] The pedestal was a looted object. According to local tradition, it had been acquired in the mid-seventeenth century by the Setupati Raghunātha Tevar, an ancestor of H.H. Raja Bhaskaraswamy Avargal, the Setupati sponsoring the 1892 celebration.

At the time of its acquisition, the Madurai Nāyakkar ('governor') Tirumalai (r. AD 1623–59) was ruling over southern Tamilnad, virtually autonomous from the fading Vijayanagar imperium that had established the Nāyakkar rule in Madurai a century earlier. Raghunātha Tevar, the Setupati of Ramnad, was his subordinate. During Tirumalai's reign, the southern kingdoms of Madurai and Mysore had fought a series of inconclusive battles, and in 1656, with the aged Tirumalai sick in bed, the Mysore ruler Kaṇṭhīrava Narasa attacked once again. Apparently, the Mysore forces penetrated all the way to Madurai, and Tirumalai's only recourse was to call on his loyal subordinate. The Madurai chronicles narrate it this way:

> Now the king Tirumalai Nāyakkar wrote and sent a letter to the Setupati. On the very day the Setupati read the letter, he immediately prepared 60,000 men and brought them. He defeated the Mysore army, drove it into the Ghats, attained victory, and returned to the king.
>
> The king was very happy, and held a feast for him in the palace. He presented him with many elephants and horses, clothing, ornaments, and the like, and he gave him the title 'Tirumalai's Setupati'. He also gave the Setupati his own Lion-faced Palanquin and other emblems such as a banner and a canopy. Calling him a son of his own lineage, Tirumalai dismissed all revenue assessments, saying that he no longer had to pay tribute. And from that time on, the Setupati ruled his territory without paying tribute, and he had the Ramanathapuram fort rebuilt as a stone fortress.[33]

The transactions between the Ramnad Setupati and the Madurai Nāyakkar described here reflect a characteristic medieval South Indian patterning of authoritative relations by which ruling kings 'shared' their sovereignty with 'lesser' kings, who thereby became subordinate participants within the overarching system. In his recent ethnohistory of this political formation, Nicholas Dirks points to the Vijayanagar ceremony of Navarātri as the dramatic ritual paradigm of the system in action.[34]

During the nine-day ceremony, the Vijayanagar emperor at the centre of the festival expressed his homage to an image of the goddess Durgā, the presiding deity of the festival, and received from her his authority to rule in the objective form of royal sword and sceptre. In her defining mythic action, Durgā had herself received weapons from all the gods to aid her in killing the demon that none but she could defeat. The subordinate governors, Nāyakkars, who were compelled to be present in the capital, would in turn express their devotion to the emperor and receive from him portions of his authority in the physical form of emblems.

> The sharing of the king's sovereignty through the transactions of the festival had the effect of incorporating the disparate elements of the kingdom into his sovereign being and rendering them all parts—metonyms—of himself, even as the emblems were themselves metonyms of his sovereignty.[35]

This personalised and embodied authority was passed down from level to level, from emperor to governor to subordinate chieftain and so on, through similar ceremonial exchange.

The primary currency of this hierarchised transactional system, Dirks tells us, were 'services' and 'honours': the subordinate offering service to his superior, the superior in turn granting honours of various sorts to the subordinate. So the Ramnad Setupati unhesitatingly offered his military service and troops to the beleaguered Madurai Nāyakkar, saving Tirumalai from defeat and attaining victory over the Mysore invaders on behalf of his overlord. The Emerald Pedestal presumably was part of the substantive 'victory' that Raghunātha acquired during the campaign and presented to his lord. Tirumalai in turn recognised Raghunātha's service with a host of honours: gifts, titles, emblems, and rights to the unfettered enjoyment of land. These royal gifts were, in fact, gifts also of limited, shared sovereignty within Tirumalai's encompassing dominion.

In this light, it is not difficult to see why Tirumalai chose the looted pedestal as a suitable object to bestow upon his worthy recipient. During an earlier campaign on behalf of the Madurai ruler, Raghunātha had helped repel a Muslim invasion led by 'Khub Khan' and had been honoured with the title 'He who propped up the kingdom'.[36] As a subordinate ruler and warrior, the Setupati certainly had acted as a prop to the Nāyakkar's rule, and so the identity of the plundered object once again refers to a political relationship. The Emerald Pedestal was a homologue not for an involuntarily subjugated source but for a willingly subordinate recipient.

The Gift of Submission

In one final variation on this general trope, an image might be given as a token of submission, a metonymic acceptance of ritual subordination, to forestall an actual invasion and a more forcible incorporation. Our example here concerns the Rāṣṭrakūṭas and Sinhalese.

In the early part of the ninth century, the Rāṣṭrakūṭa king Govinda III (r. *c.* AD 790–815) undertook two southern expeditions, during which he decisively defeated the most potent southern kingdom, the Pallavas of Kāñcīpuram, and occupied their capital. Other kingdoms of the south came under direct threat from this most powerful Indian empire, and the frightened Sri Lankan king Aggabodhi VIII, ruling in Anurādhapuram, did what he could to fend off a direct attack: he sent two images to Govinda. As a Rāṣṭrakūṭa inscription reports:

> Just as if he had forcibly subdued the self-centered [Lankan] king and his indolent chief minister with his own sceptre and brought them deaf and dumb to the City of Delight, while in Kāñcī Govinda received from Lanka two images of their lord (*prabhu*) and then set them up in a Saiva temple here [in Mānyakheṭa, the Rāṣṭrakūṭa capital], like two pillars of his fame.[37]

The epigraphical simile makes it clear that these images were to be regarded as 'deaf and dumb' representatives of a Sinhala polity that had, by this very gift, accepted the overlordship of the Rāṣṭrakūṭas. For Govinda III, more concerned with pillars of fame and ritual hegemony than the acquisition of territory, this was sufficient. The enforced diplomatic offerings of images did dissuade the Rāṣṭrakūṭas from invading the island, but only at the expense of incorporating Lanka metonymically into the Rāṣṭrakūṭa imperial formation.

What exactly were the images that the Sinhalese king sent to Govinda? Various possibilities have been suggested: statues of the demon Rāvana as 'the most ancient and traditional ruler' of Lanka, or perhaps likenesses of the king and chief minister themselves.[38] In light of the general rhetoric we have investigated in this paper, it seems much more likely that Aggabodhi sent two images of the Buddha, as his own personal lord and the highest lord of the Sinhala polity. (Aggabodhi, we may recall, celebrated his royal consecration by honouring the solid-gold Buddha of the Jewel Pavilion.) It is possible, too, that the similitude of image and ruler had been drawn even more closely by casting the Buddha image according to the proportions of the king, a Sinhala practice of 'reign-images' that has been documented for the tenth century if not earlier.[39]

Even without this close visual resemblance, though, none of the agents involved would have misread the clear statement of Sinhala subordination in the two Buddha images displayed 'like pillars of fame' in a Śaiva temple of the Rāṣṭrakūṭa capital.

Imperial Sovereignty: The Capture of Rivers

The appropriations and relocations of the art objects considered so far speaks primarily of personalised relations of dominance and subordination among rulers and of the incorporation of particular kingdoms into other polities. But other targets of appropriation make more far-reaching assertions.[40] Consider the inscriptional claims of Vinayāditya, ruler of the Cālukyas of Vātāpi in the late seventh century.

The Cālukyas at this time were the dominant power of the Deccan and had battled repeatedly with the Pallavas of Kāñcī for control of southern India. Taking advantage of a period of dynastic confusion in North India following the death of Harṣa in 647, Vinayāditya and his son, the crown prince Vijayāditya, undertook a northern campaign in about 690, where they were successful against a series of unnamed foes. They returned to the Deccan with great spoils, including a series of significant symbolic objects: the *pāli*-banner, the *ḍaḍhakka* drum, the 'great sounds' (*mahāśabda*, probably conches), and the two rivers, 'Gaṅgā and Yamunā'. Gaining these, inscriptions tell us, Vinayāditya possessed 'all the insignia (*cihna*) of highest overlordship (*paramaiśvarya*), beginning with the powerful *pāli*-banner, which he had acquired by defeating all the lords of the northern regions'.[41] They were passed on to Vijayāditya (r. AD 696–733) when he assumed the Cālukya throne, and he also came to possess 'sovereignty illuminated by insignia such as the *pāli*-banner that cause the manifestation of complete overlordship'.[42] The Cālukya inscriptions portray this particular bundle of loot not merely as the regalia or second-order signifier of a single enemy ruler but as the embodiment or representation of 'universal sovereignty,' imperial lordship of the highest order.

Evidently, we have here some extraordinary imperial objects. The *pāli*-banner (or, literally, 'flags in row'), singled out in Cālukya inscriptions as the insignia par excellence, seems to have been a particular arrangement of banners, in which a central flagstaff with the Cālukya insignia, Viṣṇu's Boar incarnation, on top was surrounded by rows of flags bearing insignia of all other dynasties in lower and peripheral

position.[43] It was thus as Ronald Inden points out, an indexical sign of the Cālukya's claim to the highest of sovereignty, encompassing and surpassing all other rulers of India.[44]

The most curious and intriguing items in this set of transportable objects, however, are the two rivers, Gaṅgā and Yamunā. The Gaṅgā may shift course gradually over the years, but how could the Cālukya king, ruling some 800 miles to the south of the river, claim to 'take' Gaṅgā? What exactly did he appropriate? Gaṅgā and Yamunā are not just rivers but also goddesses whose images often adorn the entrances of North Indian temples. Is that perhaps what Vinayāditya seized?

The Cālukyas, it turns out, were not the only southerners to obtain Gaṅgā and Yamunā. Within sixty years of Vinayāditya's northern expedition, the Rāṣṭrakūṭas had supplanted the Cālukyas as the dominant power of the Deccan and acquired the authoritative *pāli*-banner, replacing the Cālukyan Boar on top with their own insignia, Viṣṇu's mount, Garuḍa. Around AD 800, the Rāṣṭrakūṭa king Govinda III also made an expedition into North India, directed against the Gurjāra and Pāla kings, who were then battling for control of the Doab and the imperial city of Kanyakubja. He defeated the Gurjāra king Nāgabhaṭa II, then marched farther north, where the Pāla king Dharmapāla and his Kanyakubja protege, Cakrāyudha, also deferred to the royal Rāṣṭrakūṭa progress. During this campaign, the inscriptions say, Govinda 'took from his enemies the Gaṅgā and Yamunā, made beautiful by their waves, and acquired at the same moment that supreme lordship of which they are a visible sign'.[45] Once again, acquisition of the two northern rivers was epigraphically linked with the attainment of imperial sovereignty.

Two hundred years after that, when the Rāṣṭrakūṭas were no more and the Colas were the dominant power of peninsular India, the Cola emperor Rājendra I sent an army from Tamilnad north to capture the Ganges. Though well aware of the historical precedents for such an expedition, Rājendra instead chose to have himself compared with the mythical ascetic who also had altered the course of the Ganges.

> Mocking the great sage Bhagīratha, who had brought the Gaṅgā to earth through the power of his austerities, this light of the Solar lineage decided to purify his own domain with the Gaṅgā waters, brought there by the strength of his arms.[46]

The Cola army made its way north, engaging and defeating a variety of opponents until they finally reached the banks of the holy river. From there, golden pots of Gaṅgā water were transported south, according to

inscriptional accounts, carried atop the heads of kings defeated along the way.[47]

A pattern is clear. Three major peninsular dynasties of the early medieval period, each in its time the most powerful kingdom in the subcontinent, mounted military forays into the Gangetic plain, won skirmishes with whatever powers they encountered there, and claimed to have brought back to their own domains Gaṅgā and Yamunā in some sort of visible, substantive form. Moreover, none of them made any attempt in these raids to capture or retain territory in the Gangetic plain. Rāṣṭrakūṭa accounts admit this quite explicitly:

> In battles Govinda seized the noble, unshakeable fame of the kings Nāgabhaṭa and Candragupta, and then—holding the acquisition of fame as his highest aim—he plucked out the remaining kings, now deprived of support, from their own lands as if he were picking grains of rice, and reinstated them again in their very own places.[48]

The seemingly unacquisitive character of the expeditions perplexed earlier dynastic historians, who generally dismissed them as inconsequential, quixotic, and purposeless. The rulers themselves clearly did not regard their campaigns as inconsequential, however, for they repeatedly proclaimed them in inscriptions. First of all, the 'plucking and replanting' manoeuvre incorporated the subjugated opponents into the imperial system, even while leaving them in place. Further, the raids were concerned predominantly with, in Rāṣṭrakūṭa terms, the 'acquisition of fame'—and fame that could be objectified in the capture of particular symbolic objects. The peninsular powers regarded these objects as necessary to 'manifest' or 'make visible' their claims to supreme sovereignty. In medieval India, appropriating these signs of imperial sovereignty was a crucial part of constructing what Ronald Inden calls an 'imperial formation'.

An imperial formation in medieval India, as Inden describes it, was not a single state under centralised administrative control, nor was it a congeries of petty states warring against one another. Rather, it was a single complex polity ruled by a king of kings who exercised his sovereignty, directly or ritually, over other would-be claimants throughout the subcontinent.[49] In the 'scale of kingships' (or 'circle of kings', as Indian treatises on statecraft put it), other kings would be compelled to recognise the imperial sovereign as pre-eminent, for instance, by rendering ceremonial homage at his court or through the forced attendance of an iconic stand-in at the imperial capital. They became, willingly or not, subordinate

sharers in the transcending sovereignty of the king of kings who managed to create or maintain an imperial formation. Of course, subordinated rulers could always contest the ruling hegemony by claiming autonomy and seeking to construct their own 'circle', but always with the risk that the empire might strike back. Given the considerable strategic problems in holding together such a polity, only a few dynasties succeeded in constituting long-standing imperial formations in medieval India, and the Rāṣṭrakūṭas of the eighth through tenth centuries and the Colas of the eleventh and twelfth centuries were the most formidable exemplars.

What did the rivers Gaṅgā and Yamunā have to do with all this? Prior to the time of the Cālukya ruler Vinayāditya, every major imperial kingdom of India had been centred on the Gaṅgā–Yamunā river system. The Magadha and Maurya empires had ruled from Pāṭaliputra, and the imperial Kuṣāṇas had maintained a capital at Mathura. The Guptas originated at Prayāga, the very confluence of Gaṅgā and Yamunā, and ruled from there or Pāṭaliputra. From the time of Candragupta II, imperial Guptas prominently featured statuary of Gaṅgā and Yamunā in shrines throughout their domain, evoking their own political centre even as they invoked the presence of the two goddess.[50] Later, Harṣa moved his capital from the relatively peripheral Sthāneśvara, along the upper reaches of the Yamunā, to the more central Kanyakubja when he attained imperial status.

Faced with this political Gangocentricity, a regional power aspiring to more encompassing imperial sovereignty had a choice of moving to the centre, as Harṣa did, or of attempting to relocate the centre at one's own capital. The Cālukyas, Rāṣṭrakūṭas, and Colas evidently chose the second option. In their own version of Muhammad-and-the-mountain, they brought not only the mountain—in the form of the Mount Kailāsa-style temples of Śiva that they each constructed—but also the river that issued from that mountain to their own sovereign selves, remaking in the process the imperial topography of the subcontinent.[51]

In what form did they effect this? In the case of the Colas, inscriptions state explicitly that Rājendra had Gaṅgā water transported in pots. With the Cālukyas and Rāṣṭrakūṭas, the evidence is not so clear. Gaṅgā and Yamunā are simply mentioned in lists of insignia, along with other items of regalia such as banners and musical instruments, indicating only that they are material things of some sort. A Rāṣṭrakūṭa inscription does tell us that Gaṅgā and Yamunā are 'made beautiful by their waves', which describes the rivers themselves, of course, but would also apply to banners waving in the breeze or to graceful sculpted images. Scholars have offered at least three hypotheses: the Cālukyas and Rāṣṭrakūṭas seized

images of the goddesses Gaṅgā and Yamunā; they seized banners with Gaṅgā and Yamunā imprinted on them; or they took pots containing water from the two rivers. All are plausible. In the light of the recurrent plundering of images to make political statements during the medieval period, however, I consider it most likely that the Deccan powers looted images of Gaṅgā and Yamunā from existing temples at Prayāga or Kanyakubja.

Even if they were not themselves images, though, the appropriation of Gaṅgā and Yamunā had an important bearing on the art of their new homes. Both Cālukyas and Rāṣṭrakūṭas appear to have commemorated their acquisitions by constructing shrines with Gaṅgā and Yamunā prominently featured. At Lād Khān temple in Aihole, probably built during the reign of the Cālukya king Vijayāditya, images of the two river-goddesses are located on the outer columns of the porch, displayed like trophies. Further, Gaṅgā and Yamunā appear as important icons in Cālukyan art only from this time on. It is not a matter of a slowly permeating northern iconographic figure finally reaching the Deccan. Rather, it appears that the Cālukyas only now felt that they had attained the degree of sovereignty where they could display with confidence (and without fear of retribution) the North Indian river-goddesses. As for the Rāṣṭrakūṭas, Govinda III was probably responsible for construction of the shrine of the Three River-Goddesses at Ellora, an adjunct to the great Kailāsa rock-cut temple built there by his predecessor Kṛṣṇa I.[52] Three large panels on the rear wall depict Gaṅgā at the centre flanked by Yamunā and Sarasvatī, the subtle river that joins the other two at Prayāga. After the Rāṣṭrakūṭa exploits in the Doab, the Rāṣṭrakūṭas began to include Gaṅgā and Yamunā on their imperial seals, just as the Cālukyas had.

The most dramatic commemoration of Gaṅgā capture, however, was that of Rājendra. When the waters reached the Cola territories, Rājendra had a 'liquid pillar of victory' made of Gaṅgā-water, designated the 'Cola-Gaṅgā', constructed in the new capital that he had just built, Gaṅgaikoṇḍacolapuram, the 'city of the Cola king who took the Gaṅgā'. Presiding over the city was a new Kailāsa-like imperial Śiva temple. Rājendra furnished the city and the temple with objects and images seized in the course of his conquests: from the Cālukyas a Sun-pedestal, several images of Durgā, and a Gaṇeśa image; from the Eastern Cālukyas, a resting Nandi, Śiva's bull mount; from the Kaliṅgas of Orissa, three large stone images of Bhairava and Bhairavī and an awesome eight-armed Kālī image; from the Pālas of Bengal, a bronze image of Śiva dancing on Nandi's back; and undoubtedly many more since removed

by plunderers.[53] At the four entry gates of the fortified city, Rājendra placed images of the goddess Durgā or Kālī to act as guardians of the community within. One of the guardians, at least, was a Cālukyan conscript: a dramatic stone image of eight-armed Durgā defeating the Buffalo-demon, her left foot firmly planted on the back of the demon, who is on his knees and fading fast. Though the *pāli*-banner itself was no longer a target of imperial aspiration, the new capital Rājendra built was a sort of city-scale *pāli*-banner, with the tower of the Śiva temple looming over the rows of loot, insignia of the kings he had subordinated.

Destruction and Devotion

Of all modes of expropriation, certainly the most radical involves the destruction of images. Here it is not just a matter of change in proprietor but a radical transformation in form. The image is reduced to its material elements, denying or extinguishing any divine presence that may have inhabited it and risking in the process the possibility of divine retribution. Instead of continuing to exist as a second-order signifier, the object is at one moment deconstituted in an act powerful in rhetorical impact but limited in duration.

There is no question that medieval Hindu kings frequently destroyed religious images as part of more general rampages. When the Paramāras sacked the Rāṣṭrakūṭa capital of Mānyakheṭa or when the Colas levelled the Cālukya capital at Kalyāṇī, we must presume that the many temples and images of those royal centres could not have been spared. However, Hindu narratives and inscriptions seldom describe destruction of images as a directed, politically meaningful act. (Abundant narratives of international image destruction come with the entry of Islam into the subcontinent, but that is another story.) When they do, they most often treat it as an extraordinary action, something morally ambiguous that may be justified only in extreme situations. Take, for instance, the muddled image raid of the Gauḍa soldiers, described by Kalhaṇa in his *Rājataraṅgiṇi*.[54]

The great eighth-century Kashmiri ruler Lalitāditya, according to Kalhaṇa's reckoning, was for the most part a high-minded monarch, but he was also capable of duplicity in the service of imperial policy. Once, after making a promise of safe conduct to the king of Gauḍa (Bengal) and offering as surety (*madhyastha*; literally, 'intermediary') the image of Viṣṇu Parihāsakeśava, Lalitāditya treacherously ordered the king assassinated. Such a brazen act clearly departed from all standards of

proper royal conduct and called for revenge. As we might expect, the reprisal was directed not at the perpetrator of the deed but at its intermediary. A troop of the murdered king's dedicated attendants sneaked into Kashmir posing as pilgrims and made their way toward the temple of Parihāsakeśava.

Now Parihāsakeśava was not just any image. After Lalitāditya's successful conquest of the directions in the mid-eighth century, making him the premier ruler of North India, he returned to Kashmir and established a new capital at the confluence of the Vitastā and Sindhu rivers, Parihāsapura. In and around the new capital, Lalitāditya and his retinue established a number of shrines, but the dominant one was a *sarvatobhadra* temple dedicated to Viṣṇu Parihāsakeśava.[55] A *sarvatobhadra* temple was the highest form of temple structure, and the immense, silver Parihāsakeśava that stood at its centre was an image of Viṣṇu Vaikuṇṭha, the cosmic overlord whose four visages, facing in the cardinal directions, represented Viṣṇu's four primary emanations. This was the principal ruling image of the empire that Lalitāditya had established, and to attack it was to threaten the very centre of that polity.

Outside the temple, the Gauḍa soldiers mustered, preparing to destroy the imperial image. Fortunately for Lalitāditya, however, the priests of Parihāsakeśava were a vigilant lot, and the Gauḍa image raiders were not well acquainted with the fine points of Kashmiri images.

> Though the king was abroad, the priests observed that the soldiers wanted to enter, and they closed the gates of the Parihāsakeśava shrine. Aroused with boldness, the soldiers got ahold of the silver Rāmasavāmin image, which they mistook for Parihāsakeśava. They carried it out and ground it into dust. And even as Lalitāditya's troops who had come out from the city were killing them at each step, the Gauḍas continued to break it into particles and scatter them in every direction.[56]

The image of Rāmasvāmin, silver as was Parihāsakeśava, had been excavated some years earlier by Lalitāditya in a remote part of Kashmir.[57] The king had it brought to the capital, and a small stone shrine was built for it near the Parihāsakeśava temple. Although supposed to be an ancient image (Lalitāditya claimed it had been established by Rāma himself), it certainly did not possess the imperial grandeur of Parihāsakeśava. As clearly indicated by the shrine housing it, Rāmasavāmin occupied a position subordinate to the imperial image of Viṣṇu within the hierarchy of Kashmiri divinities.

By this token, then, the image raid of the Gauḍa avengers was a

botched affair. They failed to destroy Lalitāditya's central ruling image, the image that had stood as deceitful assurance of their own king's security, and they mistakenly crushed a lesser icon. But this is not the moral that Kalhaṇa draws from the incident. Rather, he chooses to praise the extraordinary devotion that the raiders showed to their former lord.

> The showers of their blood illuminated their uncommon devotion (*bhakti*) to their lord, and the earth itself was enriched. . . . What a lengthy path they travelled! And what devotion they showed to their deceased ruler! The Creator himself could not accomplish what the Gauḍa soldiers achieved that day.[58]

Utter devotional commitment to a lord (whether divine or human) may in certain circumstances transcend normal moral evaluation. Where the provocation is great, devotion may transmute normally immoral acts into exemplary ones. The Gauḍa raiders, however, were not the only ones to demonstrate loyalty to their superior.

> When those Gauḍa demons (*rākṣasas*) brought destruction, the holy Parihāsakeśava, the king's favoured image, was protected through the sacrifice of Rāmasvāmin.[59]

Images, too, are capable of *bhakti* toward their lords.

Final Destinations

The story did not necessarily end there for these images. Many of the objects referred to in this article did suffer subsequent destruction. The solid-gold Buddha of the Abhayagiri monastery, for example, undoubtedly was destroyed in the 1017 Cola raid carried out by Rājendra on Anurādhapuram:

> They broke into the relic chambers in the three chambers and throughout Lanka, stealing many costly images of gold and other metals. They violently destroyed all the monasteries everywhere, and like *yakṣas* sucking blood they took away all the treasures of Lanka.[60]

The two Buddhas sent by Aggabodhi VIII to appease the Rāṣṭrakūṭa threat were destroyed either in the 972 razing of Mānyakheṭa by the Paramāra ruler Harṣasiyaka or in the 1007 sack by Rājendra Cola. The bejewelled Kaliyavadha Kṛṣṇa image that Lakṣmaṇarāja Kalacuri stole from Orissa and gave to the deity at Somanātha was no doubt expropriated during Maḥmud's 1026 destruction of the temple and, following Ghaznavid policy, it would have been melted down along with other metal idols to gild the mosque at Ghazna.

Several of the images, though, have escaped such fates and have been able to continue their lives resituated as art objects in Indian museums. Thus, the small stone Bālakṛṣṇa carried by Kṛṣṇadevaraya from Udayagiri to his own capital in 1512 was thrown from its pedestal and its arms broken, perhaps in 1565, when Muslim armies overran the city. Such desecration and mutilation would have excluded the object from further ritual use. For art objects, however, a degree of mutilation is not necessarily a debit, for it may serve to certify age and authenticity. So, when the archaeologist A.H. Longhurst found the image lying among the debris of its disused temple in the early twentieth century, he sent it off to join the collection of the Government Museum in Madras.

Museums are contexts too, of course, and the Udayagiri Bālakṛṣṇa once again has taken on a new significance in its new location as part of a museological narrative of national identity. As we have seen, the appropriated Child-Kṛṣṇa image had been previously set up in its temple at Vijayanagar both to be worshipped as an icon of the god Kṛṣṇa and to serve as a synecdoche for the Gajapati kingdom subsumed within the encompassing Vijayanagar imperial formation. But the political formations and agonistic relations within which such rhetorical claims were stated and made sense were themselves transient, and, when Gajapati and Vijayanagar existed no more as polities, the metonymic role of the Udayagiri Bālakṛṣṇa would no longer have any currency.

Its new role derives, rather, from the colonial and postcolonial project of constructing an Indian national identity, a project in which past antagonisms are effaced whenever possible in pursuit of a more encompassing unity. This unity most often has been considered to lie in the cultural domain rather than in any past political formation, for, as the Government Museum's centennial souvenir volume put it, 'in spite of its great diversity, Indian culture has a common basic pattern'. During the twentieth century, religious objects and artifacts of all sorts, embodying the collective artistic heritage of the Indian nation, have been collected, dated, organised, and exhibited in the Madras Museum. Since 1939, the sculptural arts of India have been arranged chronologically, grouped according to major imperial periods, to present to the Indian public an account of its own artistic history in images. Here the Udayagiri Bālakṛṣṇa that once signified Gajapati subordination takes its place as a representative of the 'Vijayanagar Period (1300–1600)'.

For it, as for many Indian objects, the medieval rhetoric of objects, of victory and incorporation, has given way to the museological rhetoric of historical sequence and cumulative cultural heritage.

Notes and Referemces

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Fig. 1. Cālukya Door-Guardian, Kalyani, Karnataka, late 10th or early 11th century, taken by Rajadhiraja to Gangaikondacolapuram in 1045, now in Rajaraja Museum, Thanjavur.

Photo: American Institute of Indian Studies

Glossary

acanthus plant with thick scalloped leaves, carved ornament on capitals and other mouldings

amalaka ribbed crowning member in north Indian temples.

arabesque stylised, flowing vegetal ornament, often an elaborate interweaving of lines, leaves, flowers and occasionally figures.

architrave Lowest section of an *entablature*, resting on the top of a column and joining it to another column; also the *moulded* frame round a door or window.

arcuate a system of building in which the central structural feature is the arch, first developed by the Romans.

ashlar masonry made up of smooth, square stones laid in regular courses, as opposed to *rubble* work.

baldachin a canopy supported by columns, placed over a throne or an altar.

baluster column a column with a tapering *shaft*, bulbous at the base.

balustrade a series of baluster columns.

bangala/bangaldar curved roof-line or *vault*, following the shape of a Bengali hut.

baraka blessing; spiritual power surrounding a holy personage.

batter an inclined wall surface which widens out from top to bottom, a characteristic of early Tughlaq buildings.

battlement a parapet built along the top of a wall with indentations for purposes of defence or decoration.

baoli subterranean stepwell.

baradari a pavilion with twelve openings, with three arcades on each side.

barrel vault a continuous vault of semi-circular section, used since Roman times, also referred to as wagon-*vault*.

bays compartments of an interior, separated not by walls but by columns or transverse arches.

birka cistern, also ablution tank.

boss a projecting ornament at the intersection of *ribs* of ceilings.

bracket a prop, often ornamented, used to carry or buttress a projecting weight.

bressumer a massive horizontal beam, sometimes carved, spanning a wide opening.

burj bastion, tower, often part of a fortification or boundary wall.

caravanserai (karwānsarāi) lodging for travellers, merchants and their goods, situated on a trade route.

capital the crowning feature of a column or *pilaster*.

cavetto a simple, concave *moulding*.

chabūtra raised platform.

chahār bagh walled garden with a square plan following a fourfold division effected by intersecting water channels.

chahār ṭāq domed structure with four arched entrances.

chaitya a Buddhist *barrel-vaulted* hall.

chamfer to cut off the edge or corner.

chahār-sūq place of intersection of two main streets in a market.

chevron a *moulding* forming a zigzag, of Romanesque origin.

chhajja an *eave* projecting over a door or a window, or running along a side wall.

chhatri 'umbrella', a small open-pillared pavilion or turret.

chihil sutūn 'forty-pillared ḥall', to designate the dīwān-i 'amm or hall of public audiences.

clerestory an upper level in a building with windows.

corbelling the practice of laying stone or wood brackets horizontally to support a *cornice* or an arch.

cornice the top part of a building or wall, a *moulded* roofline.

crenellation an opening in the upper part of a parapet, indentation.

cupola dome.

cusp projecting point formed at the meeting of the *foils* in an arch.

dado the lower section of an interior wall, often decorated.

dargāh shrine of a Sufi saint; the Persian term stands for 'royal court', and was used by the Mughals to designate the imperial court.

daulat khāna-i khāṣ/dīwān-i khāṣ hall of private audiences.

dikka raised wooden platform in a mosque from which the qaḍi repeats the words and the ritual postures of the imam to relay them to a larger congregation.

dīwān-i 'ām hall of public audiences.

dormer window a window placed vertically in a sloping roof.

drum the upright structure below a dome, may have windows to allow light into the central spaces of the building.

eaves lower part of a roof projecting beyond the face of the wall.

embrasure an opening in a wall for a door or window; also opening in a parapet between two *merlons*.

engaged column a column attached to or partly sunk into a wall.

entablature the upper section of a classical column ensemble, resting on the *capital*.

eyvān /īwān vaulted hall, open at one end; under the Mughals, the term was used to designate a pillared construction.

extrados the outer curve of an arch.

farrāsh servant who puts up tents and spreads carpets, also during journeys.

finial ornamental zenith of a dome or arch or temple.

flange an edge projecting at right angles to provide strength or a means of attachment to another part of the structure.

fluting shallow, concave grooves running vertically on the *shaft* of a column.

foil a lobe or leaf-shaped curve.

fronton a *pediment*, especially over a door or a window.

garbhagṛha inner sanctum of a temple.

gesso chalk preparation used as a base for painted and gilded decoration on wood.

gopuram ornamental, *barrel-roofed* gateway of a south Indian temple.

groin-vault a *vault* characterised by the intersection of arched diagonal surfaces, or formed by the intersection of two *barrel vaults*.

guldastā ornamental pinnacle in floral form.

harba an external *miḥrāb*, prevalent in north African mosques, for those praying in the courtyard of the mosque.

gumbad dome; in the Indian context, often used to designate a domed mausoleum.

ḥammām bath or bathing establishment.

hasht bihisht 'eight paradises', an architectural plan of Timurid origins used for Mughal imperial mausolea; an irregular octagon containing a central domed chamber and rectangular open halls in the middle of its sides.

haveli residential complex, inward looking with one or more open courtyards.

hauḍ reservoir, pool, tank, at times ablution tank.

hypostyle a mosque type with a roof supported by parallel rows of columns.

'īdgah structure for community prayer, often erected for Muslim festivals.

intrados the inner curve of an arch.

jāli ornamental perforated lattice-screen.

jharoka small, projecting balcony supported by brackets, in Mughal ceremonial the architectural frame for the appearance of the emperor.

keel a *moulding* like the keel of a ship formed by two *ogee* curves meeting, or an ogee form of an arch.

khānqāh the residence of a Sufi saint.

khiyābān elevated walkway.

khutba oration delivered to the congregation in a mosque during the Friday prayers, recounting genealogies of the rulers.

khwābgāh 'dream house', the emperor's private resting apartment in Mughal palaces.

kaṇjūra (merlon) upright feature of a parapet between two *crenelles* (openings).

lintel a horizontal beam forming the upper part of a window or door frame upon which the structure above it rests.

loggia a covered arcade or gallery, open on the sides, usually at an elevated level in a building.

machicolation a parapet projecting on *brackets* on the outside of a fortification wall, with openings for arrows, missiles or boiling oil.

madrasa 'place of study', a school of theology and law associated with a mosque.

makara a type of stone console-shaped arch or balustrade, usually at either end of a short flight of external steps.

maṇḍala cosmological diagram.

maqbarā mausoleum, graveyard, tomb.

maqsurā enclosing screeen, enclosure in a mosque near the *mihrāb*, intended for the ruler.

mehmān khānah building to house guests.

masjid-i jām'a congregational mosque where Friday prayers are held and the *khutbā* read.

mihrāb niche in a mosque indicating the direction of Mecca.

me'mār architect.

minbar stepped pulpit in a Friday mosque from where the *khutbā* was read.

minār a tower.

mouldings contours given to projecting members.

muhandis engineer.

muqarnas honeycomb or stalactite vaulting composed of individual cells or small arches, often employed to fill a zone of transition between supporting walls and a dome.

nasta'liq a cursive calligraphic script.

nakshā architectural plan.

naqqār khāna (naubat khāna) 'drum house', usually situated over the gate in Mughal palace complexes.

nookshaft a shaft set in the angle of a *pier* or a wall, or in the jamb of a window or door.

ogee a *moulding* made up of a convex and a concave curve, an arch composed of two such mouldings, meeting at an apex, the ogee point.

oriel [window] a projecting bay window.

pediment roof end, triangular or circular or broken; in Western classical architecture, a piece of wall above the *entablature*.

pendentive a triangular *bracket* in the angle of two walls, connecting the base of a dome to its supporting arches.

pergola covered walk in a garden usually formed by a double row of pillars and covered with climbing plants.

pier a mass of masonry, as distinct from a column, from which an arch springs, as in an arcade or a bridge.

pilaster an ornamental column with *capital* and base, set into the wall.

pishṭāq a lofty arch framing an *īwān*; a monumental portal.

plinth projecting base of a column or wall pedestal.

post-and-lintel system see **trabeate**

purṇa ghatā, purṇa kalasa motif in Hindu and Buddhist architecture, of a water-pot with foliage growing out of it.

qanāt underground water canal with vertical *shafts* linking it at intervals to the ground surface.

qarīna 'counter-image', compositional scheme characteristic of the art of Shah Jahan's time in which two mirror images or identical features were arranged in formal symmetry on either side of a central axis.

qibla/qibla liwān direction of Mecca, the wall of a mosque oriented in that direction.

quoin corner stones at the angles of buildings, or the angle itself.

rauḍa mosque, part of a funerary complex.

roundel a recessed circular niche.

rib a projecting band on a ceiling or vault.

riwāq covered area, portico, usually on one side of a mosque courtyard.

rubble stone walling of rough, undressed stones.

ṣaḥn interior courtyard, often of a mosque.

sgraffito a method of decoration by which an outer coat of white *stucco* is partially cut away to reveal a dark undercoat and so form a design.

shaft a column, or the section of a column between *capital* and base.

śikhara the spire of a Hindu temple.

śilpa-śastra ancient Hindu treatise on the arts.

śilpi craftsmen, artists.

soffit ceiling or underside.

spandrel a triangular space enclosed by the curve of an arch and its frame.

squinch an arch spanning the corners of a square chamber and acting as a support for a dome.

stellar vault a vault in which the ribs compose a star-shaped pattern.

sthāpati master architect.

strut bracket designed to resist pressure in the direction of its length.

stucco a fine quality of plaster for ornamental modelled work in low relief; a more economical medium than stone or marble for the modelling of external features.

stūpa Buddhist hemispherical monument forming a memorial shrine of the Buddha.

taikhāna a basement room, used as a cool place to retire to during the summer months.

takhtgāh elevated platform.

ṭāq arch.

ṭaraḥ outline; design, ground-plan.

tessera a small cube of stone, glass or marble, used in making mosaics.

toraṇa ceremonial gateway.

trabeate principle of construction which, opposed to the *arcuate*, uses horizontal beams or *lintels*, supported by *brackets*, also referred to as post-and-lintel or beam-and bracket system

tracery an ornamental pattern of interlaced lines.

transept the part of a cruciform church projecting at right angles to the main building.

transverse vault a vault that crosses a nave or aisle at right angles to the long axis of a building.

trefoil arch an arch composed of three *cusps*.

vāstu architecture.

vault an arched covering in stone or brick over any building.

vihara a Buddhist monastery.

vimana main sanctuary of a south Indian temple.

volute scroll or spiral ornament on a *capital.*

wagon-vault see *barrel-vault.*

zenāna women's quarters.

ziggurat a high pyramidal staged tower, of which the angles were oriented to the cardinal points; an important part of ancient Mesopotamian temple complexes.

ziyāda an enclosure around, or an extension of, a mosque.

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